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**CALCULATION OF THE GLASS TRANSITION
TEMPERATURES OF LINEAR POLYMERS
PART 2: THE POLYMER DATA SET**

by

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W. A. Lee

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R O Y A L A E R O S P A C E E S T A B L I S H M E N T

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CALCULATION OF THE GLASS TRANSITION TEMPERATURES OF LINEAR POLYMERS

PART 2: THE POLYMER DATA SET

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W. A. Lee

SUMMARY

A large data set of 1179 polymers, with corresponding glass transition temperatures, is tabulated both in the form of chemical structures and in numerical form suitable for computer analysis. Polymers have been analysed into groups with invariant nearest neighbours and where a particular group is found in only one polymer, it has been identified. An unambiguous and easily assimilated method of analysing and classifying polymer structures into combinations of groups is illustrated which could be more widely adopted with much advantage. It is suggested that the polymer data set, with appropriate modifications and improvements, should be used as a standard set for the evaluation of T_g relationships.

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1 INTRODUCTION

A previous publication¹ (and references cited therein) underlined the importance of the glass transition temperature (Tg) in developing new polymer systems and showed that the Tgs of polymers could be calculated from their chemical structures using a relationship evaluated earlier. This relationship was employed on several polymer sets the numerical size of which was restricted because the time required to compute the results became exceedingly lengthy once the number of polymers in the set exceeded 100. Since then, however, very considerable advances have been made in the reduction in computation times, brought about by computer improvements and program changes², and in the estimation³ of the additive temperature parameters used to make predictions of Tg values for polymers. These advances made the computational aspects of the analyses of data sets comprising 1000 polymers comparatively easy, though the formation of an accurate set in a numerical form remains exceedingly arduous.

It is very important in the evaluation and subsequent use of structure/property relationships that the data used should cover as wide a range of chemical structures and Tgs as possible and that the number of polymers of each kind should be as large as possible. By this means, possible errors in the data are diluted and the parameters then derived can be used with more confidence in predictive work. With respect to the present study, the parameters derived correspond directly to component chemical groups which exist within polymers of the data set. All the polymer structures which can be predicted from the data include groups, with identical nearest neighbours to those which have already existed in polymers. On this ground, it is perhaps reasonable to hope that predicted structures have more hope of being synthesized than if a random selection of groups, without nearest neighbour constraints were combined. However, predictions are restricted, barring further assumptions, to new polymers containing combinations of the original groups. The range of polymers to which predictions can be applied is thus enhanced by increasing the number of different chemical groups represented by the polymers in the set. With this in mind, it was decided to compile a large and varied data set, evaluate several of the different relationships between Tg and structure, and particularly, to provide a wide range of parameters which can be used to predict the effect of structure on Tg in linear polymers. Another reason for using a large data set is that when this is done, it is found that particular relationships can fit well for about 300 polymers, but break down when applied to a much larger set. For predictive purposes, a large data set is seen to be necessary to prove the validity of any relationship. Previously reported sets have only numbered about 350 polymers.

This Report describes the data set and provides also a numerical analysis and characterisation of the data. This analysis should not only assist other workers to have a better understanding of the results which follow in later parts of this series, but should also greatly facilitate the evaluations of different Tg/structure relationships involving the same data. It is hoped that with improvements in the Tg values, the data set, or a further improved version, might become the basis for a standard test set and that other workers may be encouraged to use it both in the evaluation of Tg/structure relationships and in the prediction of polymer Tgs.

2 THE DATA SET

The data set comprises all the polymers which have been involved in earlier calculations (see References for list of papers) and includes most of the data published before 1980 on acrylates, methacrylates, chloroacrylates, fluoropolymers, all available data on polymers with Tg less than 0°C, polymers with alkyl side chains and a large number of polymers containing heterocyclic groups. The total number of polymers is 1179 and their structures are presented in hierarchical order⁴, with their Tgs in Table 1. The Tg data were determined by numerous different methods on samples of polymers differing in degree of crystallinity and/or polymerisation, purity, etc. These data have been adjusted, as necessary, to be on a comparable basis in respect of heating rates applied during Tg measurements, and also, insofar as it is possible, with regard to other factors affecting Tg values⁵. The values adopted approximate, wherever possible, to those expected from dilatometric measurements conducted at heating rates of about 3°C/h on undiluted samples of low crystallinity and high molecular weight. Approximately 11000 published Tg values were considered in formulating the set.

The groups which make up the polymers in the data set are shown in Table 2 where they are numerically identified. The same groups are shown in hierarchical order in an earlier Report⁴. In Table 2, the orientation of the bonds which are not linked to a group at one end indicates whether they are main-chain, or side-chain, bonds. All vertical bonds are side-chain bonds, side-chain groups are marked 'sc'. if there are only two horizontal bonds on a structure and the structure is not marked sc, they are both main-chain bonds. The only exceptions to these observations are shown in Table 3 which gives the bond orientations of specific groups where some ambiguity could arise. It will be noted that, in Table 2, some group numbers are missing. This is because the data is taken from a larger set and throughout this series of reports consistency in numbers for the groups is preserved.

Table 3
Bond locations of specific groups

Group	Main-chain bond orientation	Side-chain bond location
48	-	1,2
53	1,3	4
56	-	1,2,3
57	-	1,2,4,5
59	-	1,2,3,5
60	-	1,2,3,4,5,6
82	1(N),2	2
161	-	1,2,5
166	1,1	2,4
169	-	1,3,5
226	3,3	6

3 NUMERICAL ANALYSIS OF THE DATA SET

Calculation of additive temperatures⁷ (ATPs) for predicting polymer T_gs requires that the chemical structures of the polymer be expressed in numerical form⁶. For this purpose, it is necessary to define what is meant by a 'group'.

3.1 Definition of a group

A group is considered to be the smallest polymer segment capable of independent torsional oscillation with respect to its nearest neighbours; all the groups in the set are shown in Table 2. Each group is identified by an arbitrary code number and the nearest neighbours of any group are invariable. A group may be referred to as a 'neighbouring group', when it is necessary, in the context used, to differentiate it from a group whose neighbours are not invariant.

The invariability of nearest neighbours is an essential feature of the analysis and reflects the fact that the rotational mobility of any particular group, at a particular temperature, must be strongly dependent on the identity of its neighbouring groups, and, to a less predictable extent, on all the other groups in the polymer⁷. However, if groups were to be defined beyond their nearest neighbours, a large increase in the number of different groups would occur which would be more difficult to manage and from a statistical point of view a large increase in the ratio of variables to polymers would not necessarily increase the predictive value of the analysis⁷. Thus, immediate neighbours only are taken into account in defining a particular group in its environment. The following conventions have also been adopted:-

- (a) hydrogen and fluorine atoms are considered to be part of the group to which they are attached. (Note that in considering the seniority of a group⁴, fluorine atoms are regarded as separate components.) Examples are tri-fluoromethyl, pentafluorophenyl, etc;
- (b) ring skeletons are regarded as single groups;
- (c) multiply-bonded groups, *eg* $-\text{CH}=\text{CH}-$, $-\text{CO}-$, $-\text{CN}$ are considered to be single groups;
- (d) main-chain and side-chain groups are differentiated and designated different numbers;
- (e) side-chain-terminal groups, or primary groups, which include all singly-bonded groups and single substituents to main chains are not numbered separately, but are considered to be part of the parent group to which they are attached. The coefficient of the parent groups is increased by one for each terminal group attached to it. The results from the application of the Tg relationships to data analysed in this way are numerically the same as if the terminal groups had been treated as separate groups, as would be expected, and the complexity of the results is greatly reduced;
- (f) groups in the main- and side-chain series $-(\text{CX}_2)_n-$, where x is H, or F, and n varies from 3 to 23 are treated as follows:-
 - (i) the series is written in the form $-\text{CX}_2-(\text{CX}_2)_n-\text{CX}_2-$;
 - (ii) the value $n - 2$ is then used to identify the group number from Table 2, *eg* 309, 359, 409, or 459, if $n = 11$, corresponding to $X = \text{H}$ main chain; $X = \text{H}$, sidechain; $X = \text{F}$, main chain; $X = \text{F}$, side chain;
 - (iii) all the groups within the brackets are each given the identified number;
 - (iv) both of the groups which are immediately outside the bracketed groups, that is, the groups which are neighbours to the bracketed groups, are denoted 6, 7, 132 or 133, for groups 302 to 321, 352 to 371, 402 to 421, and 452 to 471, respectively.

Thus, for a main-chain group with $X = \text{F}$ and $n = 13$ as in $-(\text{CF}_2)_{13}-$, groups within the bracket are all numbered 411 and each is said to have two neighbours each numbered 132. If one of the series $-(\text{CX}_2)_n-$ is a neighbour to any other group, *eg* as in $-\text{CO}-(\text{CX}_2)_n-$, then the neighbour CO is said to have a neighbour itself (within the bracketed sequence) numbered 6, 7, 132 or 133 (rather than 302

7

to 321, 352 to 371, 402 to 421, or 452 to 471) following the above notation. If this distinction were not made for groups in these series, there would be 2325 more groups (defined by section 3.2).

- (g) Asymmetrical groups are differentiated from their mirror images in order to show unambiguously the location of their nearest neighbours. The structural variations which arise are covered by a further set of rules based on the following procedure which determines unambiguously the numbers to be assigned to the single groups making up the neighboured group. Note that in a polymer containing more than one asymmetric group the whole procedure is repeated for each asymmetric group in turn: orientation of one asymmetric group does not enable the numerical identify of another asymmetric group to be determined.
- (i) Write down the asymmetric group and its nearest main-chain neighbours as they occur in the polymer repeating unit.
 - (ii) Orientate the asymmetric group under consideration, preserving the same linkages, so that the numbers designated to the neighbouring groups are in increasing order from left to right. If one of the neighbouring groups is itself an asymmetric group, then the neighbouring asymmetric group is placed on the right side, regardless of its numerical value. The group number of the asymmetric group under consideration is then determined by reference to Table 2 where a search is made for the same asymmetric group in the same orientation. If both of the neighbouring groups are asymmetric, *eg* if they are identical, then the group number allocated is the lowest of the two numbers allocated to the asymmetric group and its mirror image group in Table 2. Reference to Table 2 may show the asymmetric group under consideration, but not in the orientation required. In such cases, it is permissible within the rules to rotate, notionally, the group in question about a horizontal axis through its centre before making the comparison. (Rotation about a vertical axis, or an axis normal to the paper, just produces a mirror image as can be seen, *eg* with groups 286 and 287.)

For example, take Polymer 486, the second polymer of Table 1. The polymer is firstly written down as shown in Table 1, but with the methylene chain on the left-hand side. The methylene single-groups at each end of the methylene chain are both numbered 6 (see rule (f) above), so, in the polymer, each of the heterocyclic groups has a neighbour which is an asymmetric group and a single-group

numbered 6. The left-hand heterocyclic group should now be orientated so that the neighbouring asymmetric group is on its right-hand side, as required in rule (g)(ii) above. In this example, the orientation is already correct. Reference to Table 2 shows this left-hand asymmetric group to be numbered 179 (not 87, which is the mirror image, nor 167, nor 170, which have the wrong bond orientations). As required, the rules are next applied to the asymmetric heterocyclic group on the right as seen in Table 1. This time, the polymer structure must be orientated so that the methylene chain is on the left of the asymmetric group under consideration so that the structure is seen as though through the paper from the other side, because once again the neighbouring asymmetric group must be on the right-hand side. When this is done, the heterocyclic group under consideration is again seen to be number 179. Thus, in the polymer, the aspect from the end of the methylene chain is of a single group denoted number 179, looking either to the left, or to the right. Summarising, therefore, the single groups present in Polymer 486 are seen to be, reading from left to right, -179-179-6-306-6, and the number of single groups represented by 306, which is a combination of methylene groups, is 6, making 10 single groups.

3.2 Group combinations

As stated in section 3.1, groups are identified by an arbitrary code number and the nearest neighbours of any particular group are invariable. Each assemblage, consisting of a single-group and its neighbours, is also given a unique arbitrary number. This arbitrary secondary level of coding is not absolutely necessary because a number for the assemblage could be formed by joining together the numbers of the constituent groups in numerical order to form one long number (consisting of up to 21 digits), but by using a shorter number, errors are greatly limited. A particular group, therefore has two numbers, which must be clearly distinguished from each other. One number corresponds to single units as in Table 2 and the second, which is used in the calculations, corresponds to a 'neighbourhood group' in which nearest neighbours are taken into consideration. In the remainder of this series of Reports, the former group will be referred to as a 'single group' and the latter as a 'neighbourhood group', or, more often, just a 'group'. A complete computer listing of all the groups used in the polymer analyses is provided in Table 4. The Table is arranged in two sets of three columns with a full stop marking the end of the first set. Column 1 of this table, provides the group number, column 2, the main single-group number, and column 3, represents the single groups which are neighbours to the main

single-group. The latter, which ends with a full stop, is a composite number. It is right adjusted in columns of three digits, in numerical order from left to right, and with each set of three digits representing a single-group number, for example, "1001049108" represents single groups 108, 49, 1 and 1. Likewise for columns 4 to 6. Thus Group 25 consists of a main-chain single-group, number 121, with nearest neighbours 108, 49, 1 and 1. The 1107 groups listed are taken from a larger catalogue of groups and are not numbered consecutively.

Referring now to the analysis of Polymer 486 in section 3.1, we found the single group sequence to be -179-179-6-306-6. The corresponding groups in the polymer (combinations of single groups with nearest neighbours) are:

- | | | | |
|-----|-----|-------------------------|---------|
| (1) | 179 | with nearest neighbours | 6 179 |
| (2) | 179 | with nearest neighbours | 179 6 |
| (3) | 6 | with nearest neighbours | 179 306 |
| (4) | 306 | with nearest neighbours | 6 6 |
| (5) | 6 | with nearest neighbours | 306 179 |

Evidently, groups (1) and (2) are identical, as are (3) and (5).

In Table 4 these combinations are rewritten in the form:

Group number	Main single group	Neighbouring groups	
1197	6	6179	(1) and (2) above
1306	306	6006	(4) above
2139	179	6179	(3) and (5) above

Note that in accordance with section 3.1 (f) (last paragraph), the single group 306 is renumbered 6 when it is a neighbour and that all single groups, in such sequences of identical single groups, are also renumbered.

3.3 Polymer analysis

A complete analysis of the 1179 polymers in the data set is provided in Table 5. Each new set of data is preceded by an asterisk which is followed by the polymer number, the number of groups in the polymer, the Tg and numbers which are to be taken in pairs, representing group numbers and their coefficients (the number of such groups in the polymer). Continuation lines are used for group numbers and their coefficient values and these are distinguished by not being preceded by an asterisk. Thus, the polymer considered in sections 3.1 and 3.2 above, polymer number (PNo.) 486, contains 10 groups (Ngroups), has a Tg of 623K and contains two groups each of types 1197 and 2139 and six groups of type 1306.

The group and polymer numbers are arbitrary numbers and retained from previous analyses; some numbers are missing from a consecutive ordering.

The foregoing analysis of polymers into combinations of groups is, in practice, reduced to merely submitting the single-group sequence to computer analysis. It provides an unambiguous and easily assimilated method of analysing and classifying polymer structures which could be more widely adopted with much advantage.

4 CHARACTERISTICS OF THE DATA SET

4.1 Polymers having unique groups

The significance of unique groups in polymers has been discussed in an earlier Report⁷. A unique group is one which does not occur in any of the other polymers in the set analysed. Polymers containing one, or more, such groups are referred to as 'unique polymers'. In previous calculations, and possibly in calculations undertaken by other workers, the parameters for a unique group were arrived at by choosing a value which equated the calculated with the observed Tg. Thus the calculated Tg for such polymers was always equal to the observed Tg and such polymers provided no evaluation of the relationship between calculation parameters and Tgs though their presence generally did not affect the ATPs of polymers which did not contain unique groups. In the present analysis, which used statistical methods for Tg prediction^{2,3}, the calculated and observed Tg values for unique polymers are not usually equal and the inclusion of polymers with unique groups in the present analysis does affect the values of all ATPs. The way in which the presence of unique polymers affects the results and bears on the evaluation of different relationships for the calculation of Tg, should always be analysed, otherwise a correct assessment cannot be made of the fit of calculation parameters with the data set from which they are derived. Previous workers have not identified unique polymers.

The polymers in the present data set were trawled for unique groups, unique polymers were removed: the trawl was repeated and a fresh set of unique polymers discovered and removed. This process was repeated until all the unique polymers have been removed. 395 unique polymers were found in four trawls. The unique polymers are identified in Table 6 along with their unique groups. All the unique polymers have been included in the present data set in order to provide as wide a structural variety of groups and ATPs as possible for the prediction of polymer Tgs.

4.2 Distribution of groups within the polymer set

If the data set is to be representative of a wide range of different polymer structures, then the constituent chemical groups should be distributed widely and evenly. Table 7 provides an analysis of the number of polymers containing each of the 1107 different groups. The Table is divided into pairs of numbers, the first, "Grno", identifying the group number and the second, "Npol", which is terminated by a full stop, is the number of polymers containing that group. Thus, group 833, which is represented in 226 polymers, has the widest distribution in the entire set. 535 different groups are present in only one polymer, making that group and polymer 'unique' (see section 4.1 and Table 6). Further distributional analysis of this kind is provided in Table 8 where numbers are presented in pairs, with the second number ending with a full stop. Thus 162 different groups (Ng) are present in two polymers (Np) and only one group, is represented in 176 polymers.

Table 8

Distribution of group occurrences in the polymer set

Ng	Np	Ng	Np	Ng	Np	Ng	Np	Ng	Np	Ng	Np	Ng	Np	Ng	Np
535	1	162	2	82	3	56	4	36	5	26	6	26	7	23	8
23	9	14	10	13	11	13	12	7	13	5	14	4	15	2	16
8	17	2	18	5	19	1	20	5	21	3	22	4	23	1	24
4	25	2	26	1	28	1	30	3	31	2	32	2	33	2	34
2	35	3	36	1	37	2	38	1	39	1	40	1	41	1	44
3	47	1	48	1	49	1	51	1	52	1	54	2	57	1	60
1	66	1	68	1	82	1	92	1	96	1	108	1	120	1	136
1	138	1	176	1	226										

Table 1 divides the data set polymers into classes which are arbitrarily based on the most senior of the constituent groups. Many of the single groups within the polymers could be used to extract particular classes of polymers, for example, ethers, esters, imidazoles, etc. It is of interest to examine the effects of chemical structure on the Tgs of polymers in classes, and to facilitate this a table has been prepared which shows which polymers contain each neighbored group in turn. This table contains other data relating to calculation parameters and will be presented in the next part of this Report.

4.3 Distribution of Tg values within the data set

The distribution of Tg values within the data set is shown in Table 9. The data is presented in paired values, with the Tg, in K, first and the number of polymers (Npo) with that Tg followed by a full stop. The mean Tg value is 350 K. Banded values are shown at the bottom of the Table. It can be seen that there is

a concentration of values in the elastomer region, 200/300K, but otherwise the spread of values is much as it is likely to be for polymers in general.

5 CONCLUSIONS

A large data set of 1179 polymers is provided, with corresponding glass transition temperatures, in the form of chemical structures and in numerical form suitable for computer analysis. Polymers have been analysed into groups with invariant nearest neighbours and those groups present in only one polymer have been identified. The data set has been characterised showing the distribution of groups and of Tgs.

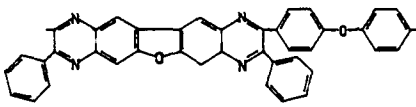
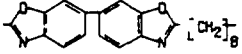
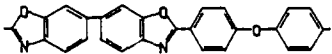
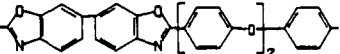
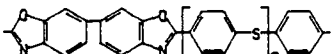
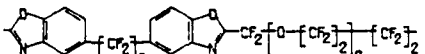
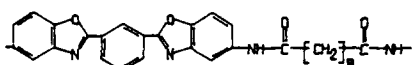
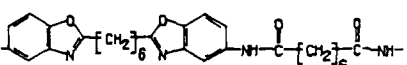
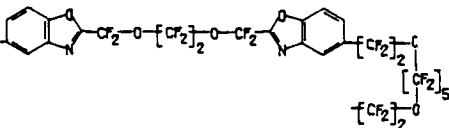
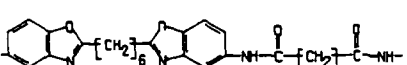
An unambiguous and easily assimilated method of analysing and classifying polymer structures into combinations of groups is illustrated which could be more widely adopted with some advantage.

It is suggested that the polymer data set, with improvements as necessary, should be used as a standard set for the evaluation of Tg relationships.

Table 1

13

CHEMICAL STRUCTURES AND GLASS TRANSITION TEMPERATURES OF POLYMER DATA SET

 POLYMER 1155 T_g 669	 POLYMER 496 T_g 623
 POLYMER 1165 T_g 843	 POLYMER 1163 T_g 562
 POLYMER 1164 T_g 553	 POLYMER 1157 T_g 272
 POLYMER 1162 T_g 383	 POLYMER 1159 T_g 340
 POLYMER 1088 T_g 253	 POLYMER 1158 T_g 345

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Table 1 (continued)

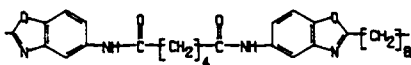
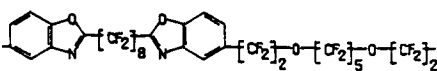
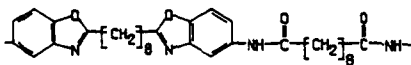
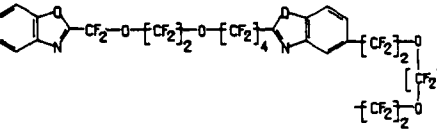
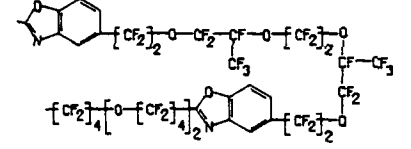
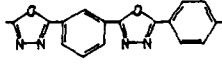
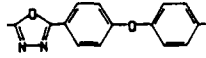
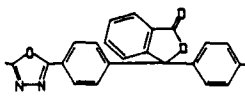
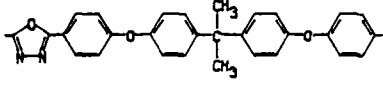
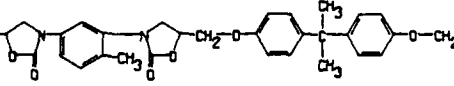
 POLYMER 1160 T_g 348	 POLYMER 1087 T_g 263
 POLYMER 1181 T_g 358	 POLYMER 1089 T_g 248
 POLYMER 1156 T_g 238	 POLYMER 1166 T_g 541
 POLYMER 1187 T_g 513	 POLYMER 1188 T_g 653
 POLYMER 452 T_g 453	 POLYMER 1171 T_g 385

Table 1 (continued)

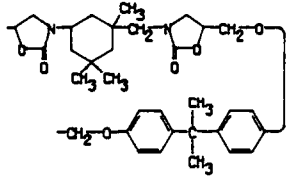
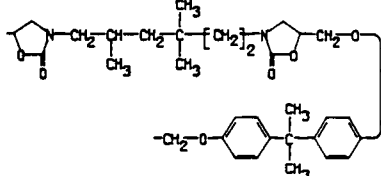
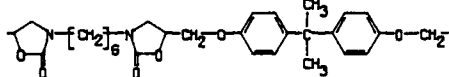
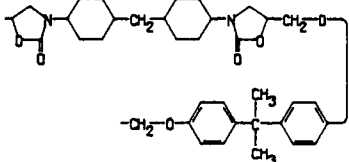
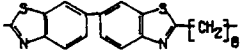
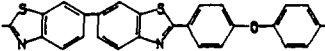
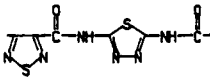
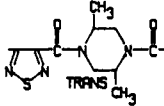
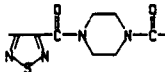
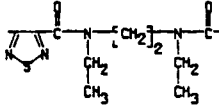
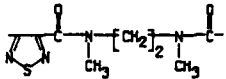
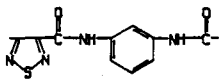
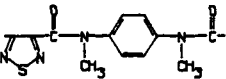
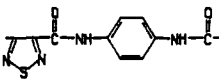
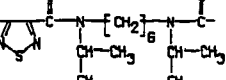
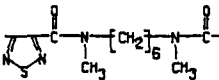
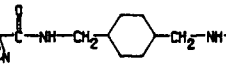
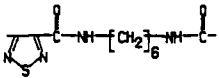
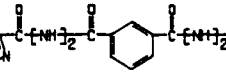
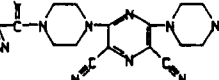
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 POLYMER 1170 T_g 347	 POLYMER 1189 T_g 425
 POLYMER 489 T_g 511	 POLYMER 1174 T_g 581
 POLYMER 1183 T_g 423	 POLYMER 1193 T_g 501
 POLYMER 1190 T_g 477	 POLYMER 1175 T_g 337

Table 1 (continued)

 POLYMER 1185 T_g 335	 POLYMER 1180 T_g 491
 POLYMER 1187 T_g 413	 POLYMER 1181 T_g 543
 POLYMER 1184 T_g 278	 POLYMER 1186 T_g 311
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 POLYMER 1176 T_g 481	 POLYMER 1191 T_g 495

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Table 1 (continued)

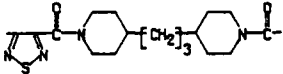
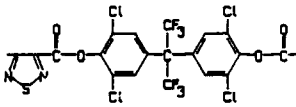
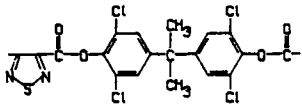
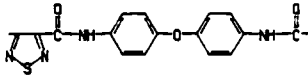
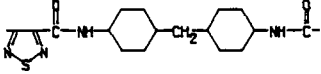
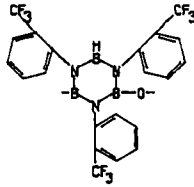
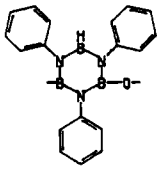
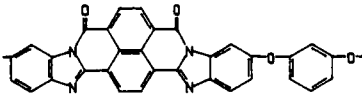
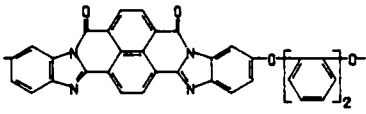
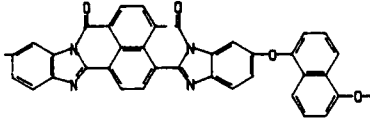
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 POLYMER 1189 T_g 463	 POLYMER 1182 T_g 480
 POLYMER 1177 T_g 468	 POLYMER 1194 T_g 405
 POLYMER 1195 T_g 353	 POLYMER 1198 T_g 588
 POLYMER 1196 T_g 563	 POLYMER 1197 T_g 581

Table 1 (continued)

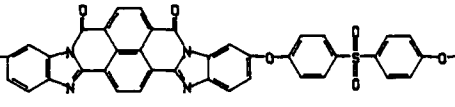
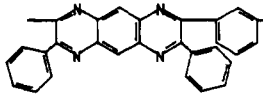
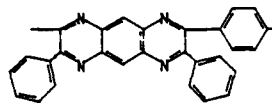
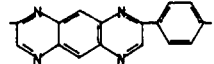
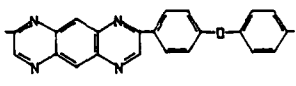
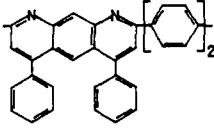
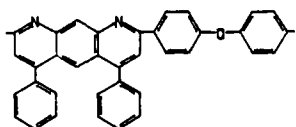
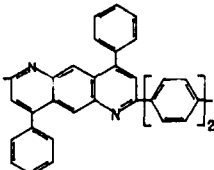
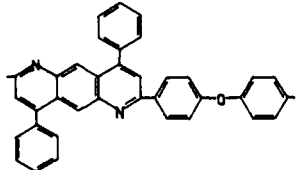
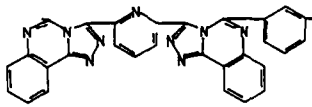
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 POLYMER 1201 T_g 658	 POLYMER 1202 T_g 655
 POLYMER 1203 T_g 616	 POLYMER 1205 T_g 655
 POLYMER 1207 T_g 642	 POLYMER 1204 T_g 646
 POLYMER 1206 T_g 623	 POLYMER 1208 T_g 605

Table 1 (continued)

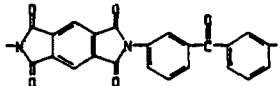
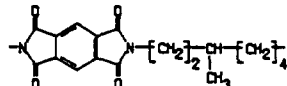
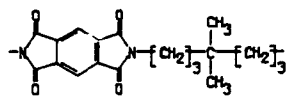
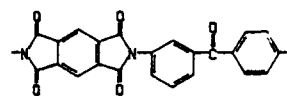
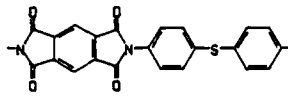
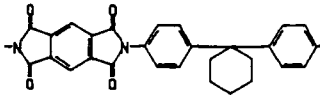
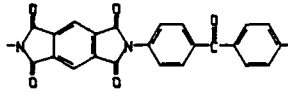
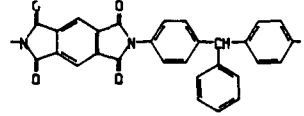
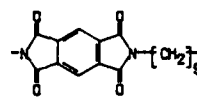
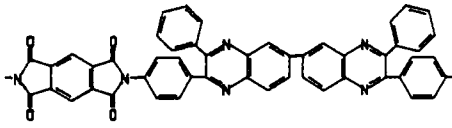
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 POLYMER 1212 T_g 408	 POLYMER 1217 T_g 613
 POLYMER 1225 T_g 618	 POLYMER 1219 T_g 623
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Table 1 (continued)

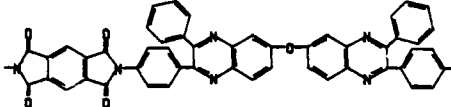
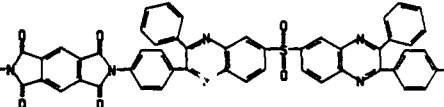
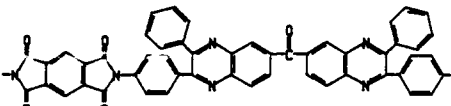
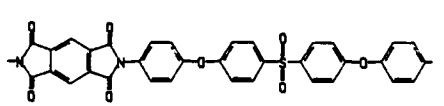
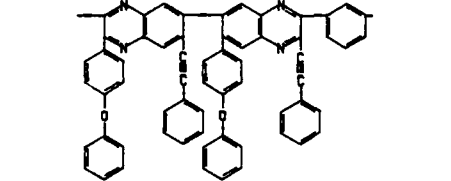
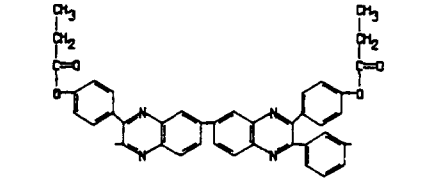
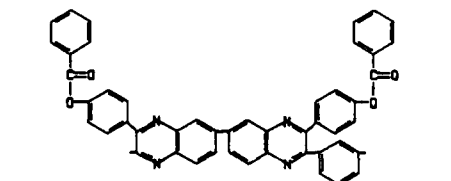
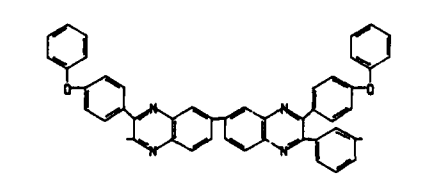
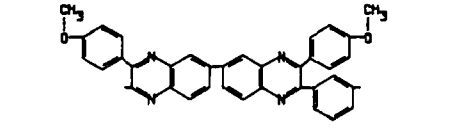
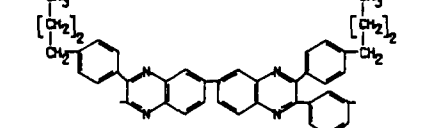
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 POLYMER 1222 T_g 513	 POLYMER 1221 T_g 583
 POLYMER 1244 T_g 478	 POLYMER 1253 T_g 545
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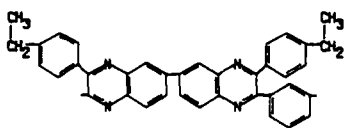
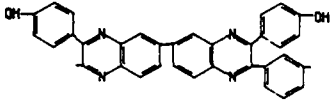
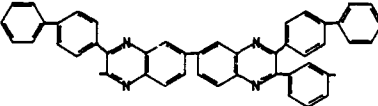
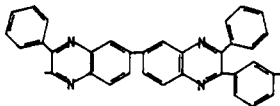
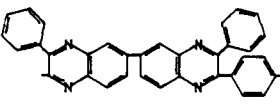
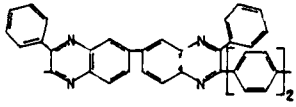
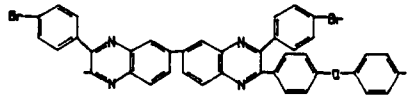
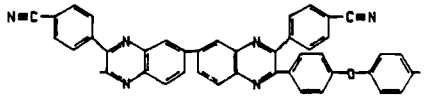
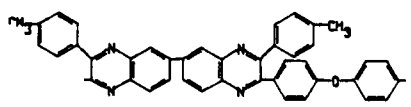
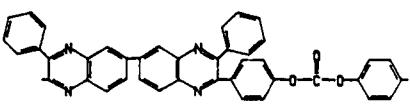
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 POLYMER 1259 T_g 639	 POLYMER 1245 T_g 677
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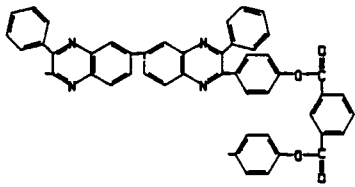
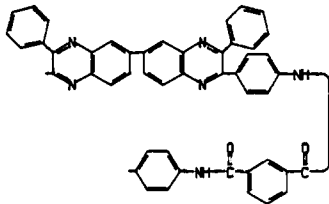
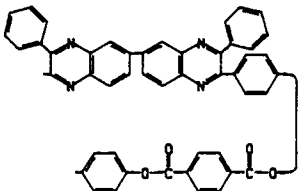
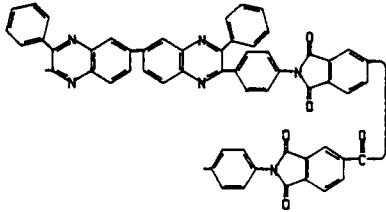
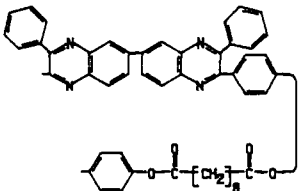
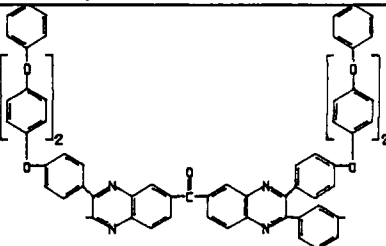
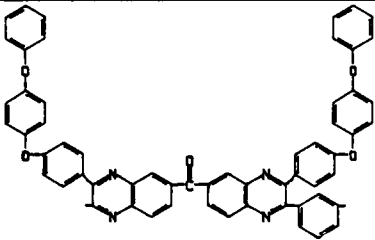
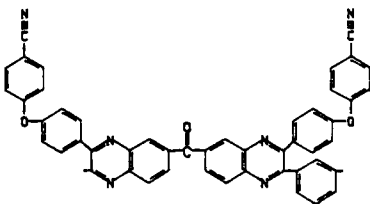
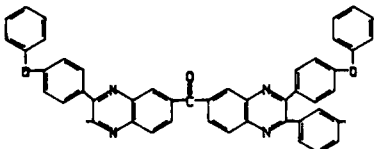
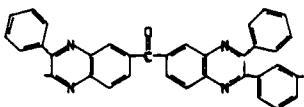
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 POLYMER 1251 T_g 450	 POLYMER 1255 T_g 463
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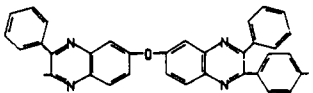
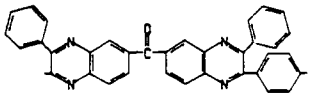
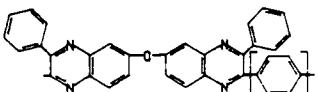
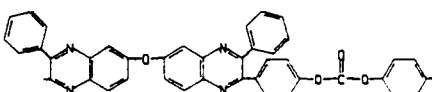
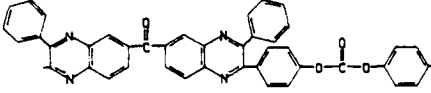
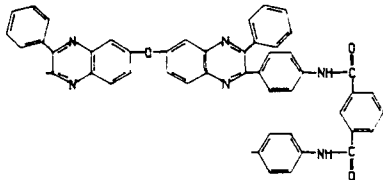
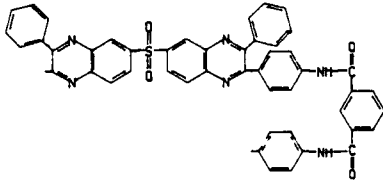
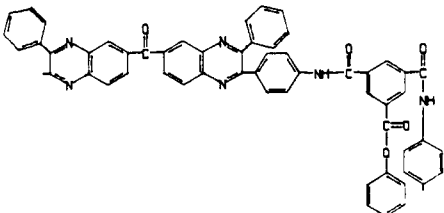
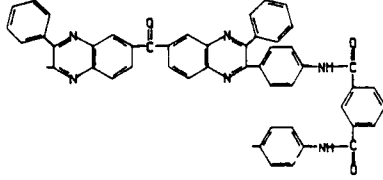
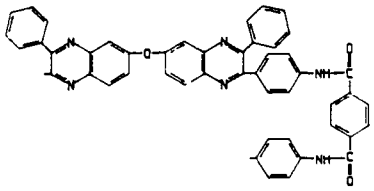
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 POLYMER 1267 T_g 663	 POLYMER 1273 T_g 510
 POLYMER 1265 T_g 513	 POLYMER 1271 T_g 571
 POLYMER 1275 T_g 551	 POLYMER 1263 T_g 603
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Table 1 (continued)

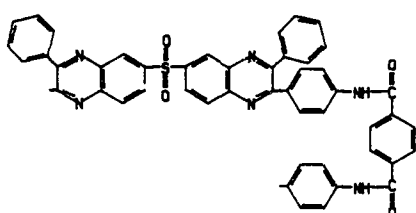
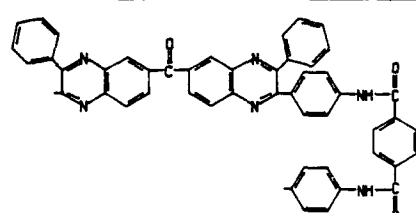
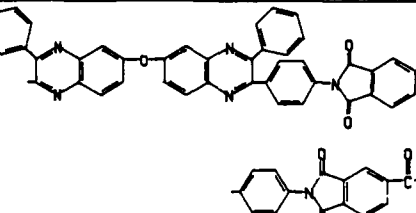
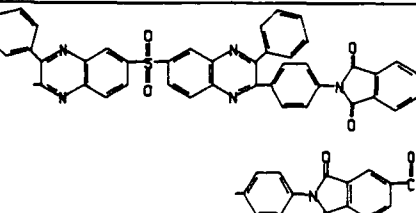
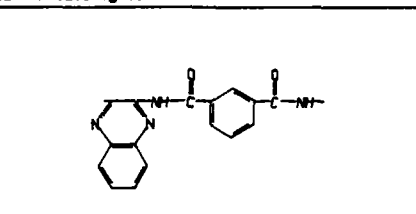
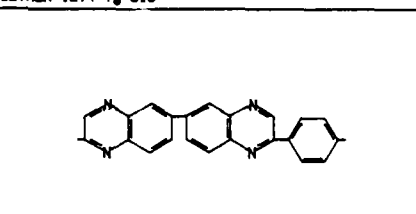
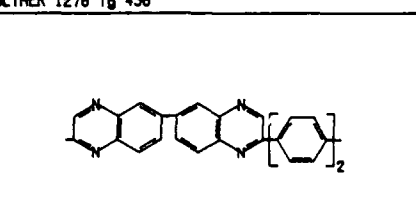
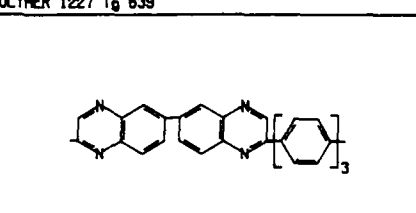
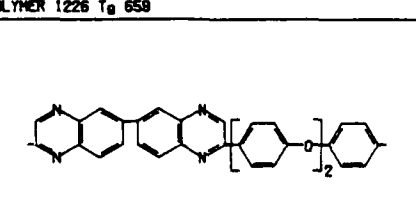
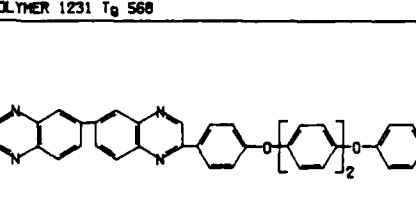
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 POLYMER 1278 T_g 436	 POLYMER 1227 T_g 639
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Table 1 (continued)

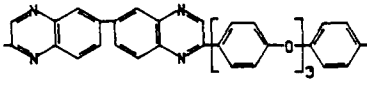
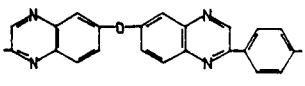
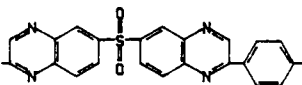
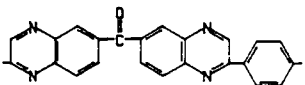
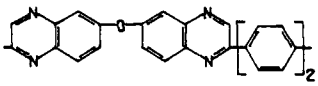
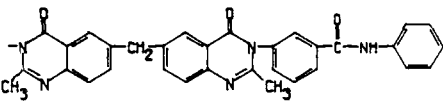
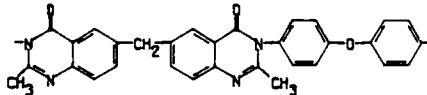
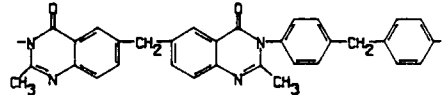
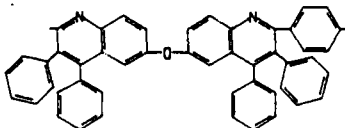
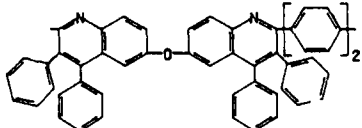
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 POLYMER 1282 T_g 605	 POLYMER 1277 T_g 581
 POLYMER 1279 T_g 663	 POLYMER 1208 T_g 487
 POLYMER 1211 T_g 511	 POLYMER 1210 T_g 531
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Table 1 (continued)

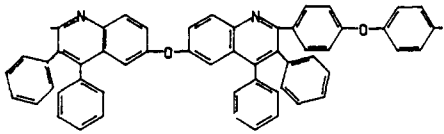
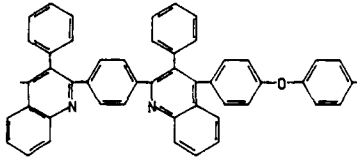
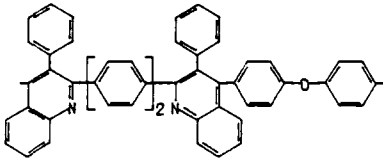
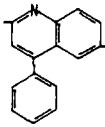
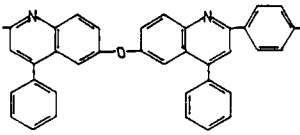
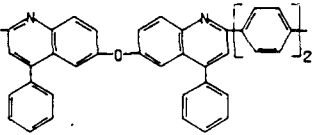
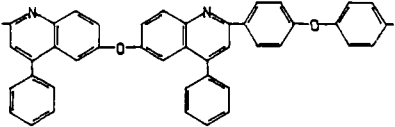
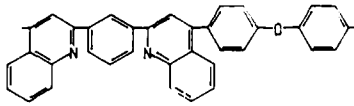
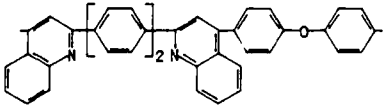
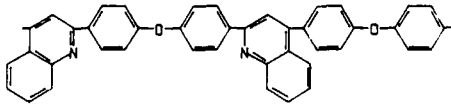
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 POLYMER 1294 T_g 608	 POLYMER 1290 T_g 678
 POLYMER 1292 T_g 563	 POLYMER 1291 T_g 571
 POLYMER 1293 T_g 529	 POLYMER 1297 T_g 531
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Table 1 (continued)

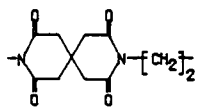
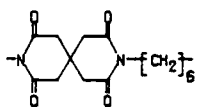
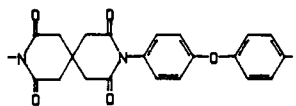
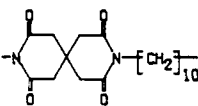
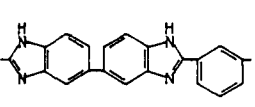
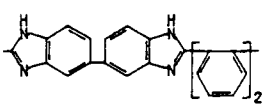
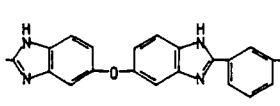
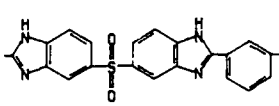
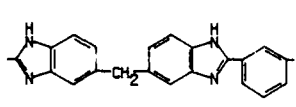
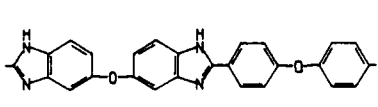
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 POLYMER 1286 T_g 463	 POLYMER 1283 T_g 341
 POLYMER 1305 T_g 703	 POLYMER 1388 T_g 663
 POLYMER 1301 T_g 503	 POLYMER 1303 T_g 553
 POLYMER 1299 T_g 488	 POLYMER 1302 T_g 533

Table 1 (continued)

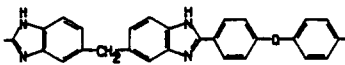
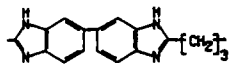
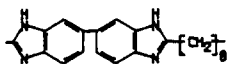
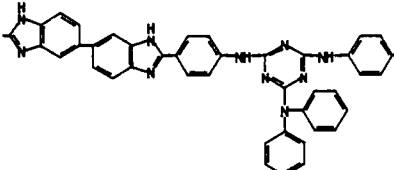
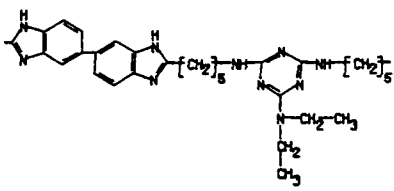
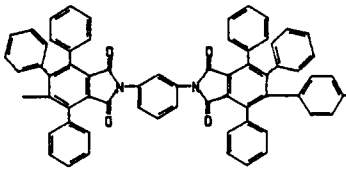
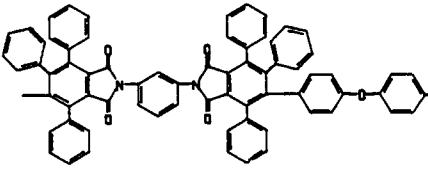
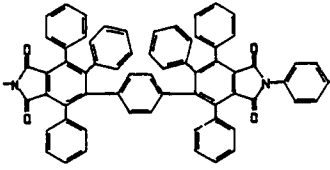
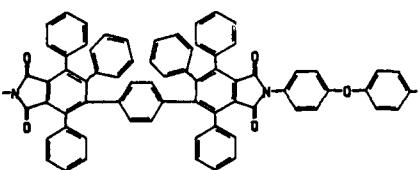
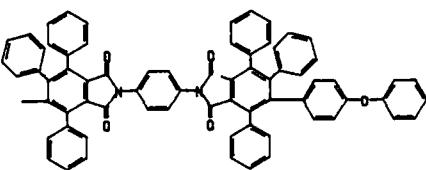
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 POLYMER 488 T _g 507	 POLYMER 1305 T _g 502
 POLYMER 1304 T _g 483	 POLYMER 1377 T _g 689
 POLYMER 1381 T _g 629	 POLYMER 1378 T _g 739
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Table 1 (continued)

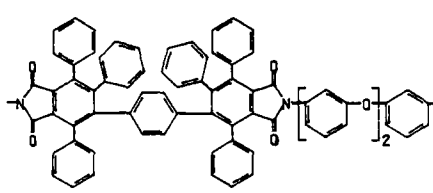
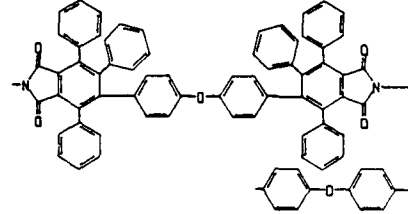
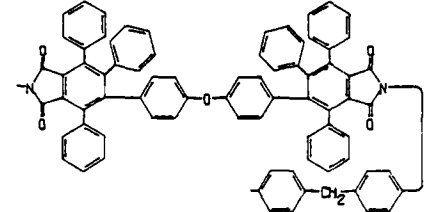
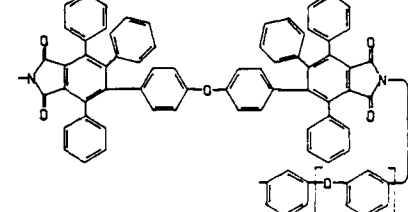
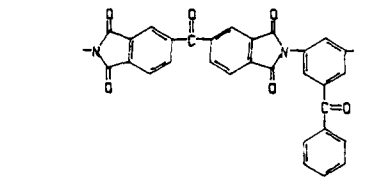
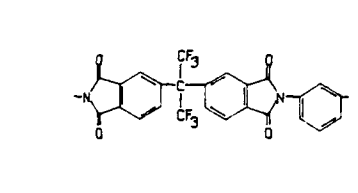
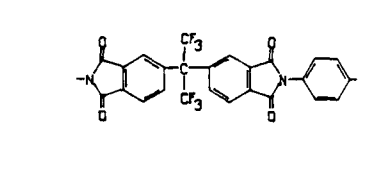
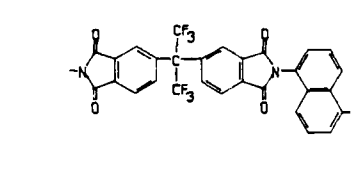
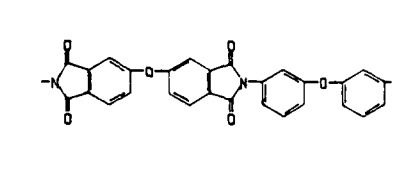
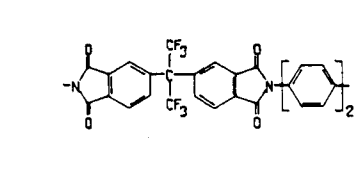
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 POLYMER 1383 T_g 629	 POLYMER 1380 T_g 534
 POLYMER 1309 T_g 553	 POLYMER 1334 T_g 560
 POLYMER 1335 T_g 589	 POLYMER 1333 T_g 628
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Table 1 (continued)

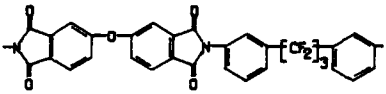
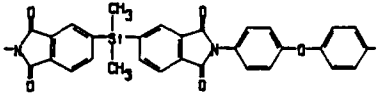
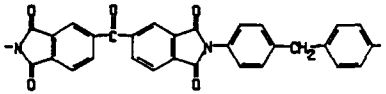
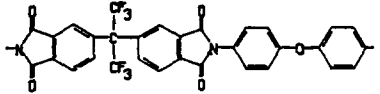
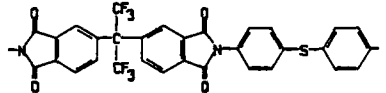
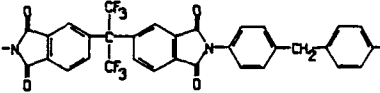
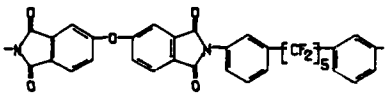
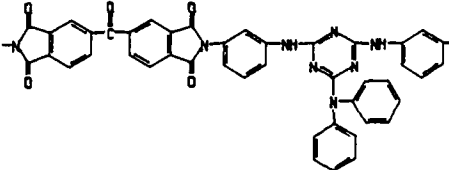
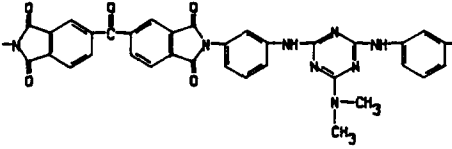
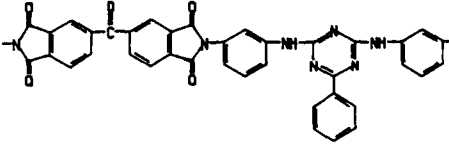
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 POLYMER 1317 T_g 563	 POLYMER 1337 T_g 548
 POLYMER 1338 T_g 546	 POLYMER 1356 T_g 554
 POLYMER 586 T_g 583	 POLYMER 1313 T_g 583
 POLYMER 1312 T_g 587	 POLYMER 1314 T_g 585

Table 1 (continued)

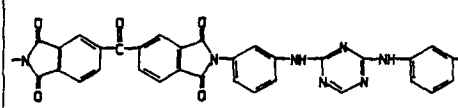
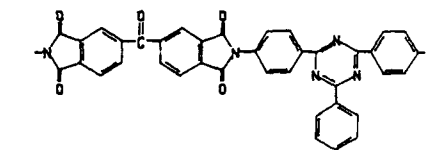
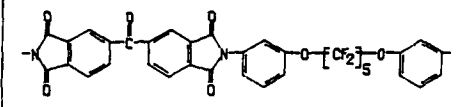
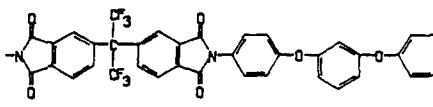
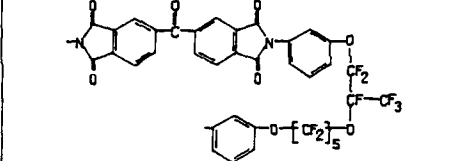
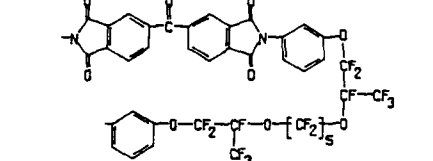
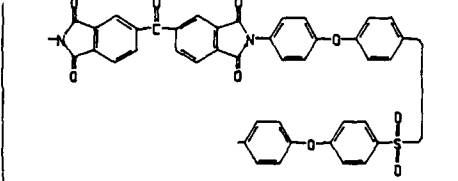
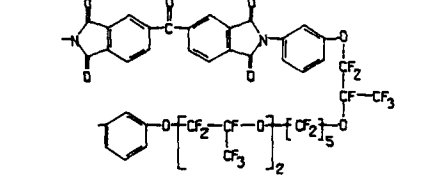
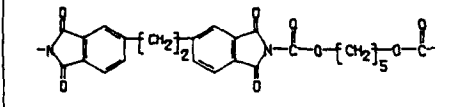
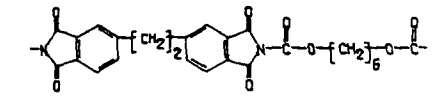
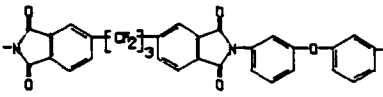
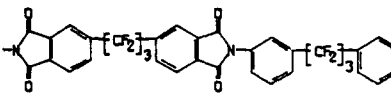
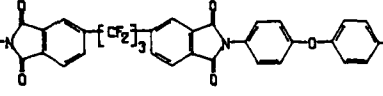
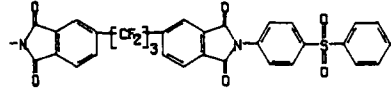
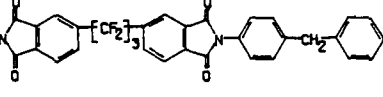
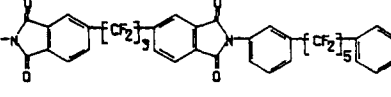
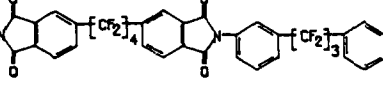
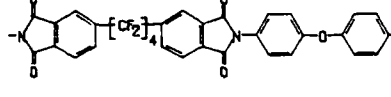
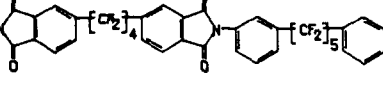
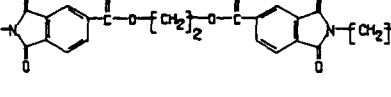
 POLYMER 1315 T_g 563	 POLYMER 1319 T_g 628
 POLYMER 1366 T_g 403	 POLYMER 1358 T_g 482
 POLYMER 1387 T_g 383	 POLYMER 1385 T_g 383
 POLYMER 1316 T_g 533	 POLYMER 1562 T_g 353
 POLYMER 1327 T_g 388	 POLYMER 1328 T_g 383

Table 1 (continued)

 POLYMER 554 T_g 441	 POLYMER 359 T_g 418
 POLYMER 362 T_g 463	 POLYMER 630 T_g 522
 POLYMER 786 T_g 468	 POLYMER 358 T_g 371
 POLYMER 550 T_g 422	 POLYMER 555 T_g 475
 POLYMER 549 T_g 407	 POLYMER 1322 T_g 371

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Table 1 (continued)

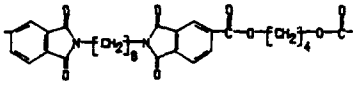
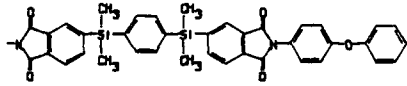
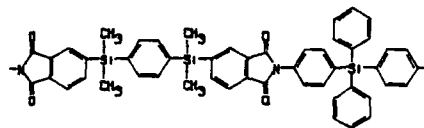
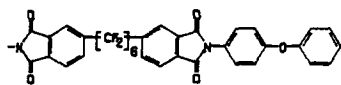
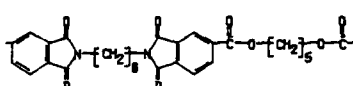
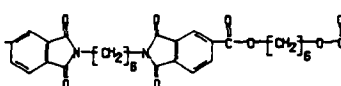
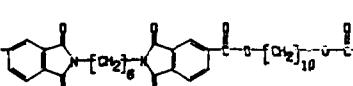
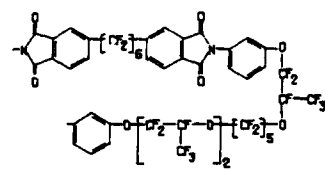
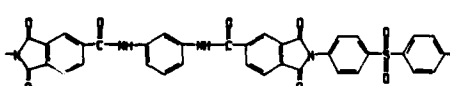
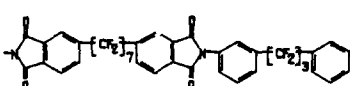
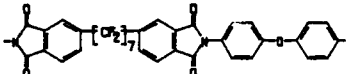
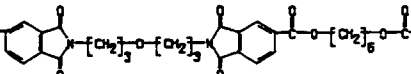
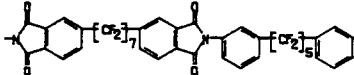
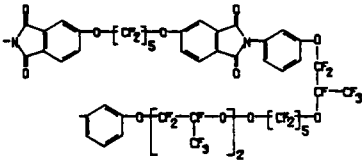
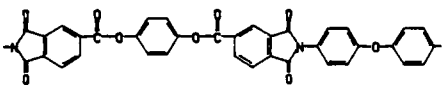
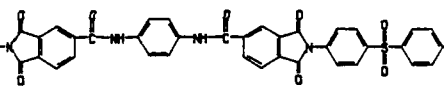
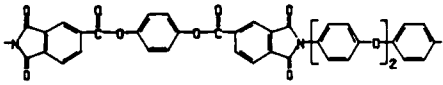
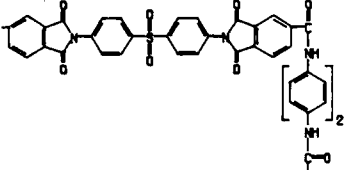
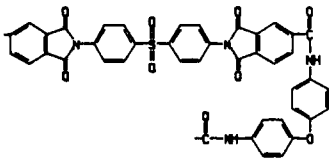
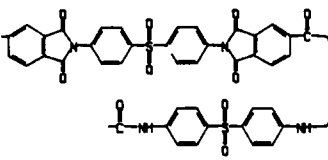
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 POLYMER 1329 T_g 453	 POLYMER 796 T_g 448
 POLYMER 1342 T_g 348	 POLYMER 1341 T_g 340
 POLYMER 1340 T_g 318	 POLYMER 1363 T_g 333
 POLYMER 1320 T_g 384	 POLYMER 562 T_g 398

Table 1 (continued)

 POLYMER 800 T_g 450	 POLYMER 1375 T_g 334
 POLYMER 551 T_g 376	 POLYMER 1554 T_g 313
 POLYMER 1324 T_g 503	 POLYMER 1321 T_g 641
 POLYMER 1323 T_g 473	 POLYMER 1368 T_g 643
 POLYMER 1370 T_g 683	 POLYMER 1371 T_g 580

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Table 1 (continued)

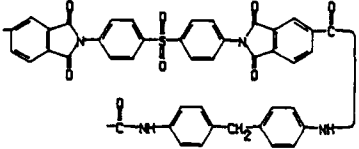
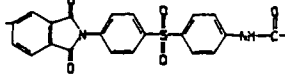
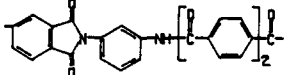
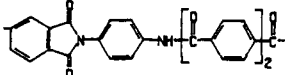
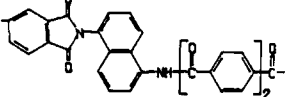
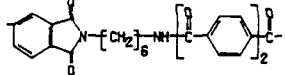
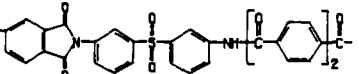
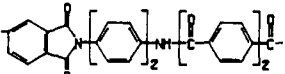
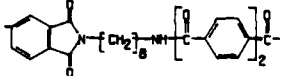
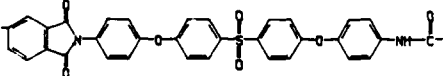
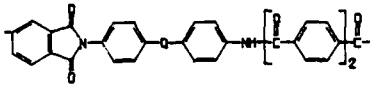
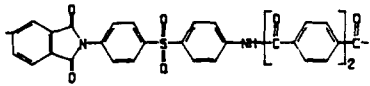
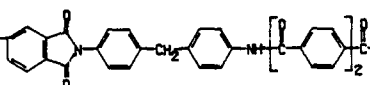
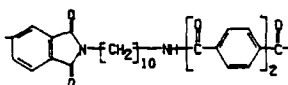
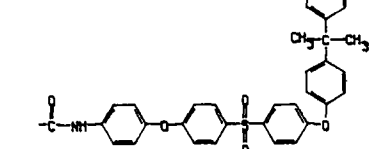
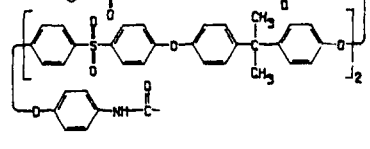
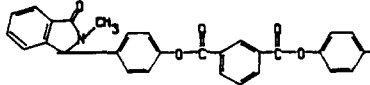
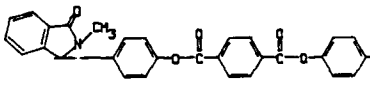
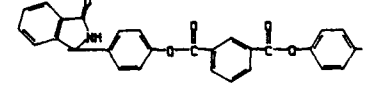
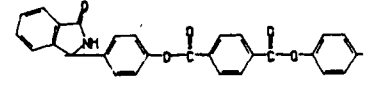
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 POLYMER 1361 T_g 588	 POLYMER 1362 T_g 613
 POLYMER 1307 T_g 528	 POLYMER 1344 T_g 489
 POLYMER 1372 T_g 487	 POLYMER 1308 T_g 603
 POLYMER 1345 T_g 508	 POLYMER 1386 T_g 543

Table 1 (continued)

 POLYMER 1364 T_g 483	 POLYMER 1374 T_g 535
 POLYMER 1363 T_g 505	 POLYMER 1325 T_g 484
 POLYMER 1367 T_g 488	 POLYMER 1385 T_g 473
 POLYMER 1508 T_g 548	 POLYMER 1510 T_g 545
 POLYMER 1511 T_g 588	 POLYMER 1512 T_g 590

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Table 1 (continued)

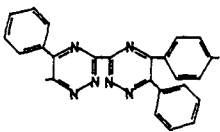
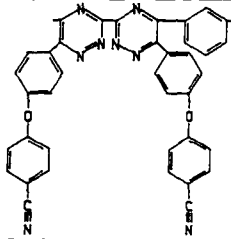
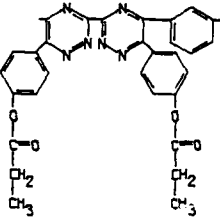
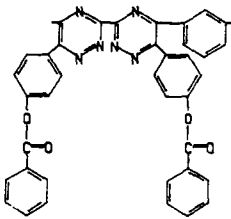
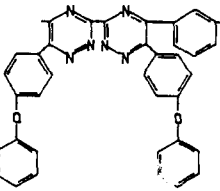
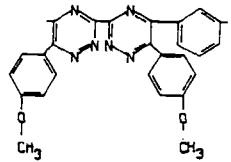
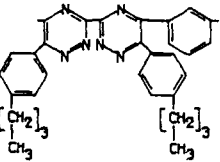
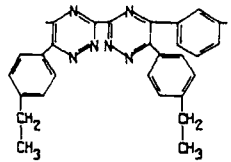
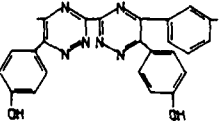
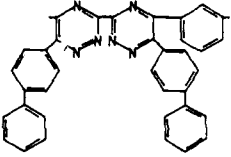
 POLYMER 1440 T_g 565	 POLYMER 1432 T_g 474
 POLYMER 1446 T_g 504	 POLYMER 1427 T_g 521
 POLYMER 1438 T_g 478	 POLYMER 1436 T_g 516
 POLYMER 1430 T_g 477	 POLYMER 1434 T_g 495
 POLYMER 1435 T_g 800	 POLYMER 1428 T_g 536

Table 1 (continued)

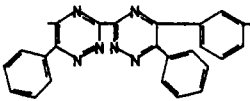
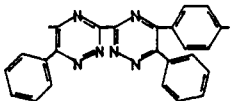
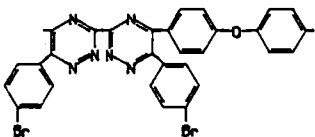
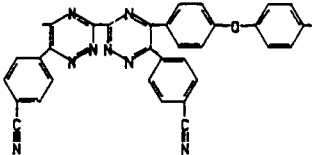
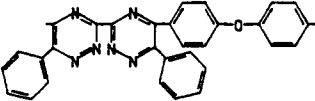
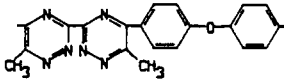
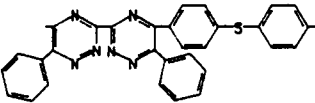
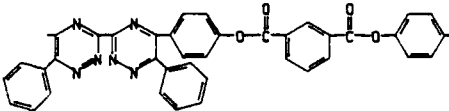
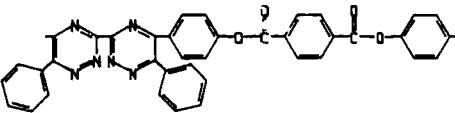
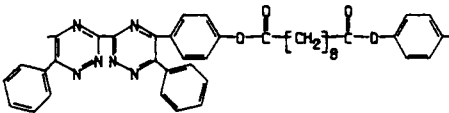
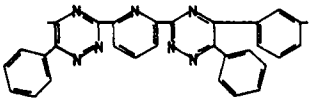
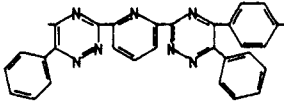
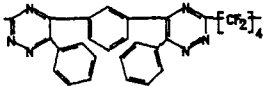
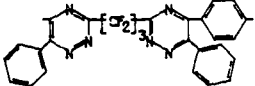
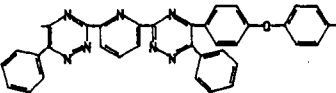
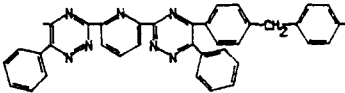
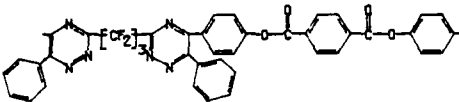
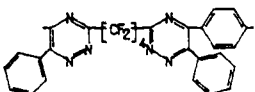
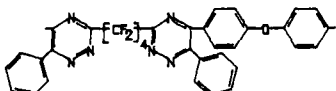
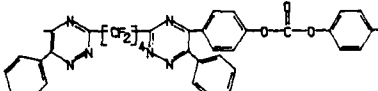
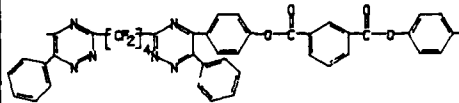
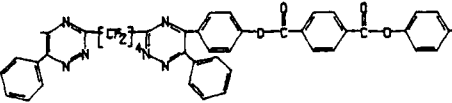
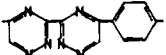
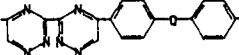
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 POLYMER 1429 T _g 580	 POLYMER 1433 T _g 556
 POLYMER 1443 T _g 533	 POLYMER 1437 T _g 483
 POLYMER 1444 T _g 523	 POLYMER 1445 T _g 527
 POLYMER 1558 T _g 530	 POLYMER 1442 T _g 441
 POLYMER 1458 T _g 530	 POLYMER 1459 T _g 530

Table 1 (continued)

 POLYMER 1448 T_g 417	 POLYMER 1454 T_g 453
 POLYMER 1461 T_g 493	 POLYMER 1460 T_g 468
 POLYMER 1455 T_g 438	 POLYMER 1449 T_g 438
 POLYMER 1453 T_g 428	 POLYMER 1450 T_g 418
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 POLYMER 1423 T_g 523	 POLYMER 1424 T_g 507

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Table 1 (continued)

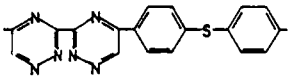
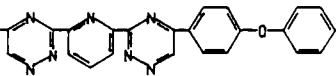
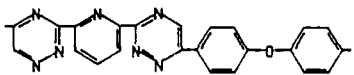
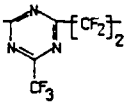
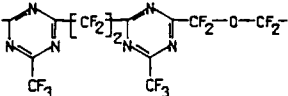
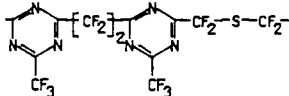
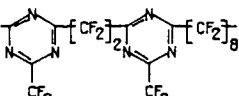
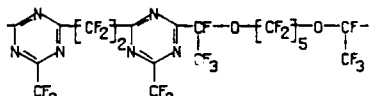
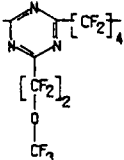
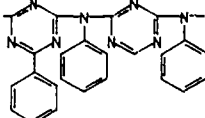
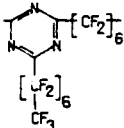
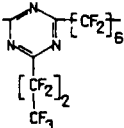
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 POLYMER 827 T_g 270	 POLYMER 828 T_g 266
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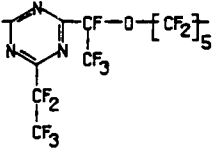
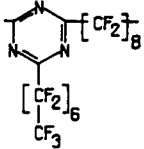
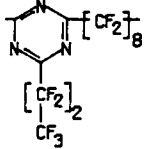
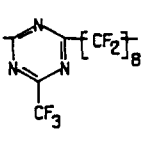
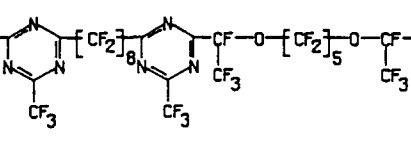
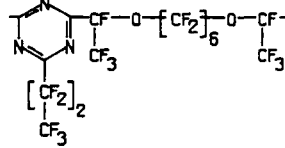
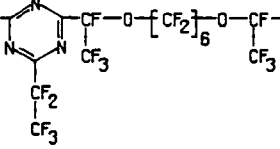
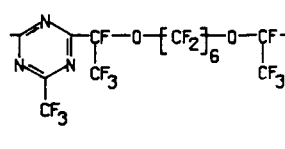
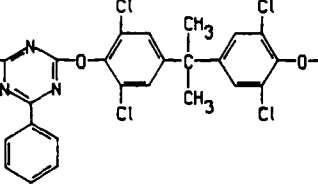
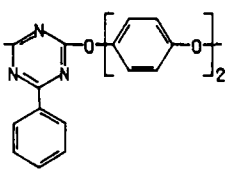
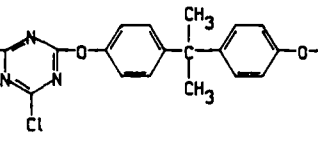
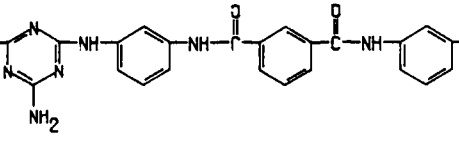
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 POLYMER 964 T_g 259	 POLYMER 965 T_g 260
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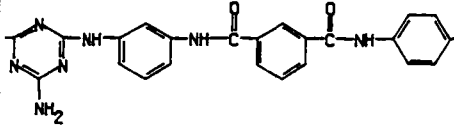
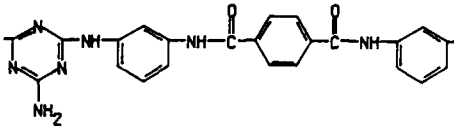
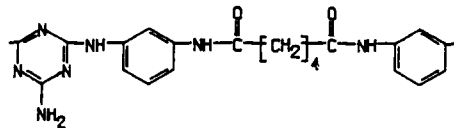
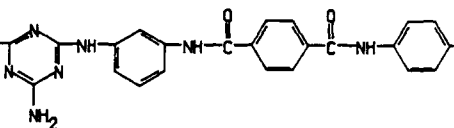
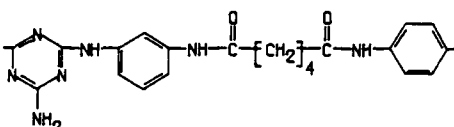
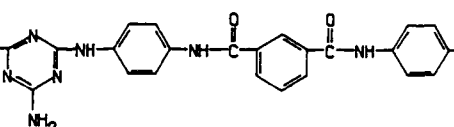
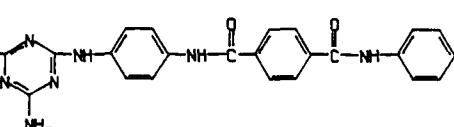
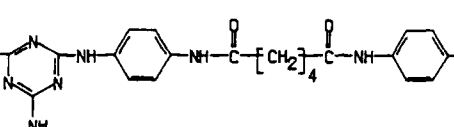
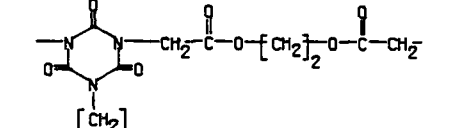
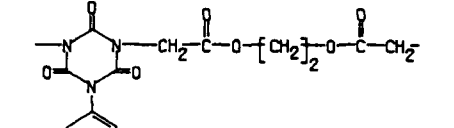
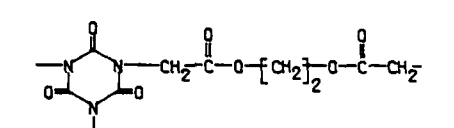
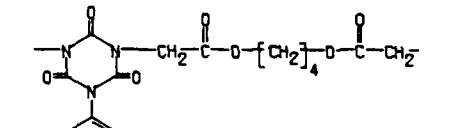
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 POLYMER 1422 T_g 588	 POLYMER 1416 T_g 478
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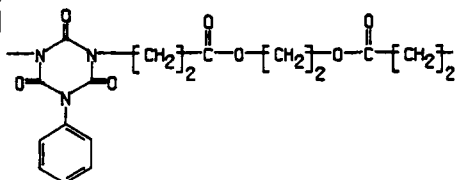
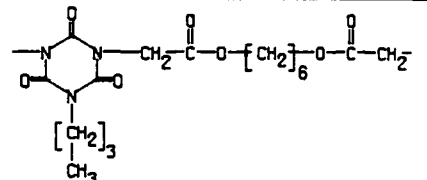
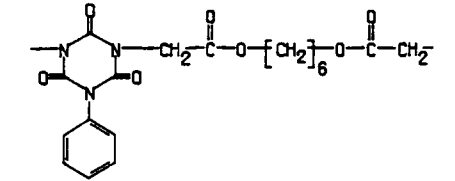
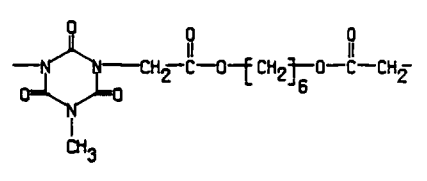
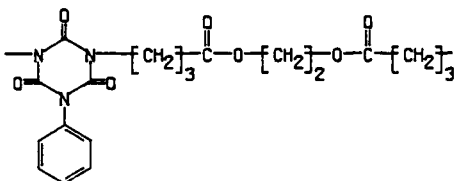
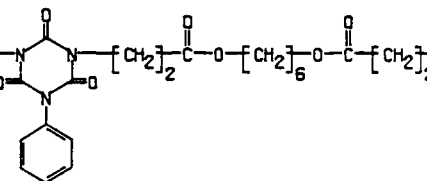
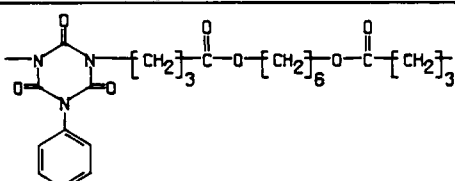
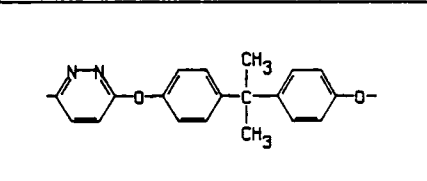
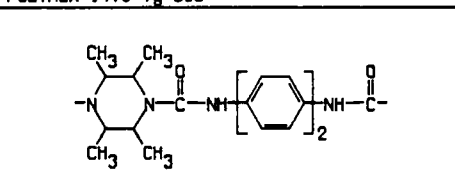
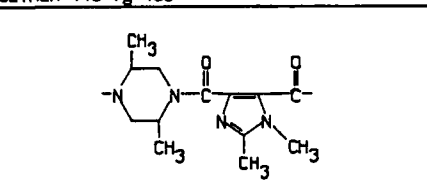
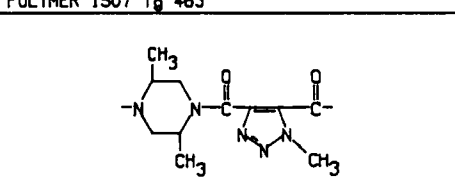
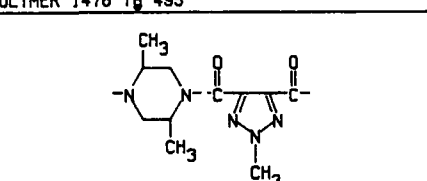
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 POLYMER 1470 T_g 303	 POLYMER 445 T_g 453
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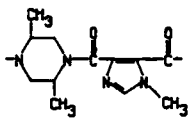
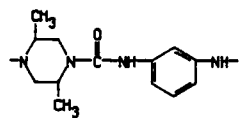
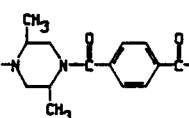
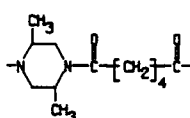
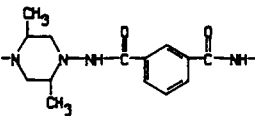
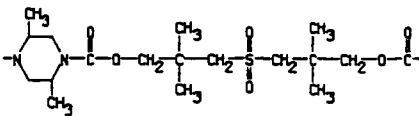
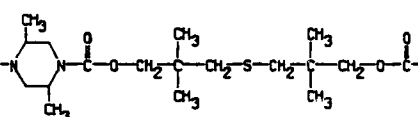
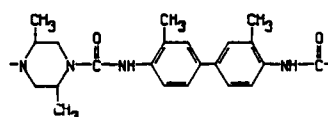
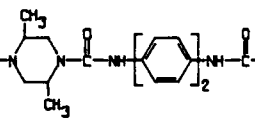
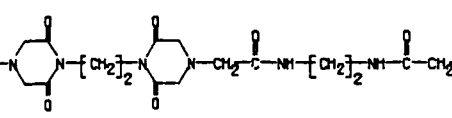
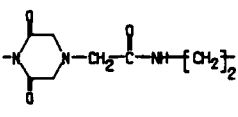
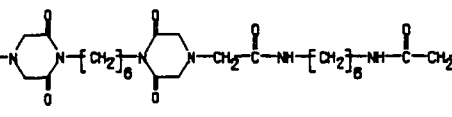
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 POLYMER 1482 T_g 303	 POLYMER 1478 T_g 478
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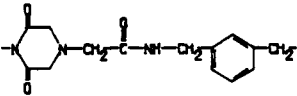
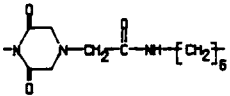
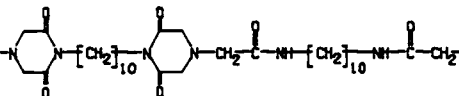
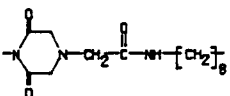
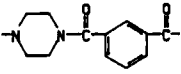
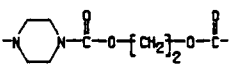
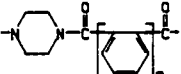
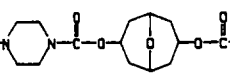
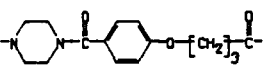
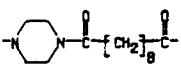
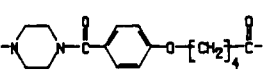
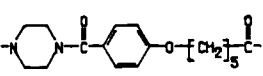
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 POLYMER 1495 T_g 466	 POLYMER 1497 T_g 376
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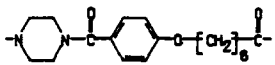
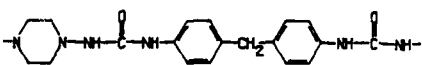
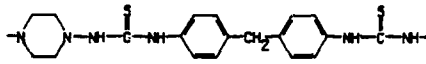
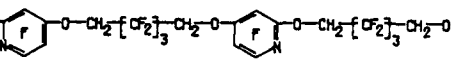
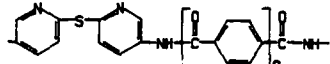
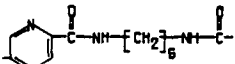
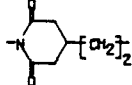
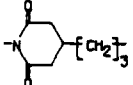
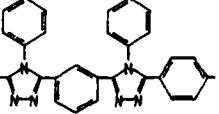
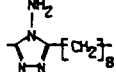
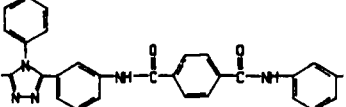
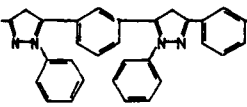
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 POLYMER 1515 T_g 436	 POLYMER 1514 T_g 354
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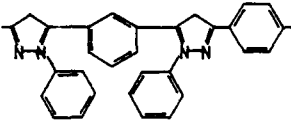
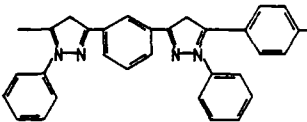
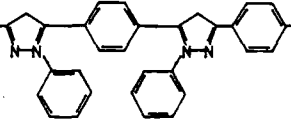
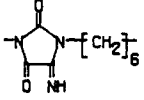
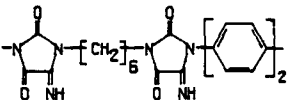
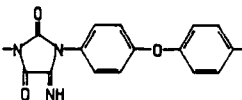
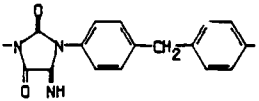
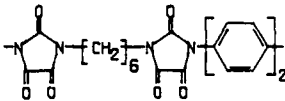
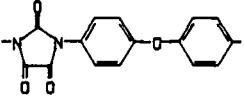
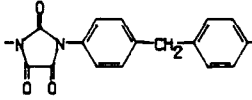
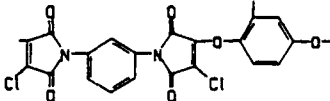
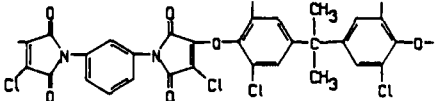
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 POLYMER 1519 T_g 518	 POLYMER 1528 T_g 293
 POLYMER 1527 T_g 458	 POLYMER 1525 T_g 508
 POLYMER 1526 T_g 499	 POLYMER 1524 T_g 503
 POLYMER 1523 T_g 561	 POLYMER 1522 T_g 552
 POLYMER 1538 T_g 467	 POLYMER 1536 T_g 495

Table 1 (continued)

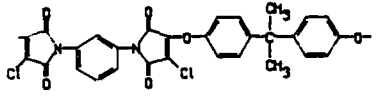
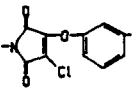
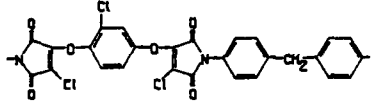
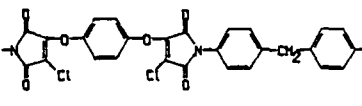
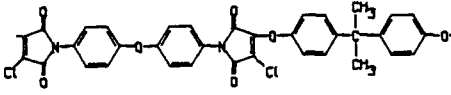
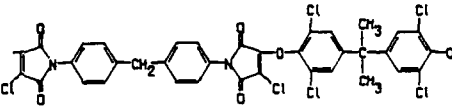
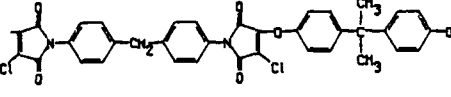
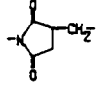
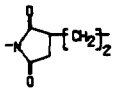
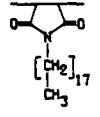
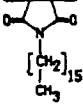
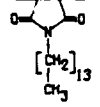
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 POLYMER 1534 T_g 457	 POLYMER 1532 T_g 465
 POLYMER 1537 T_g 447	 POLYMER 1533 T_g 488
 POLYMER 1531 T_g 448	 POLYMER 1530 T_g 473
 POLYMER 1529 T_g 388	 POLYMER 1397 T_g 348
 POLYMER 1396 T_g 348	 POLYMER 1395 T_g 351

Table 1 (continued)

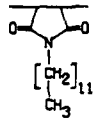
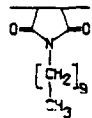
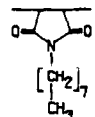
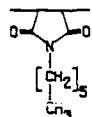
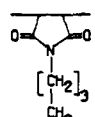
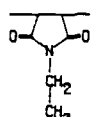
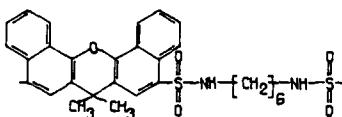
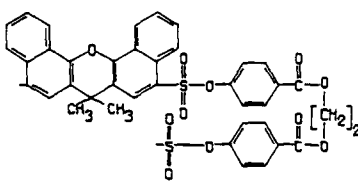
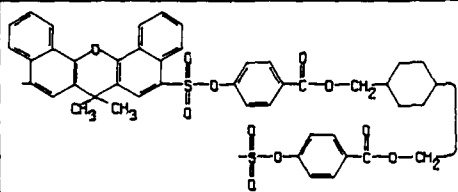
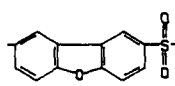
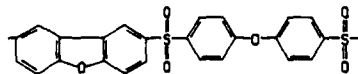
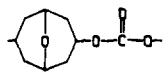
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 POLYMER 1392 T_g 393	 POLYMER 1391 T_g 422
 POLYMER 1390 T_g 461	 POLYMER 1389 T_g 524
 POLYMER 1553 T_g 469	 POLYMER 1552 T_g 413
 POLYMER 1551 T_g 454	 POLYMER 1554 T_g 633
 POLYMER 1585 T_g 563	 POLYMER 1547 T_g 470

Table 1 (continued)

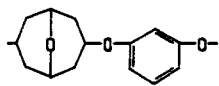
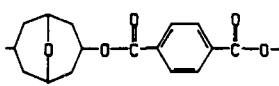
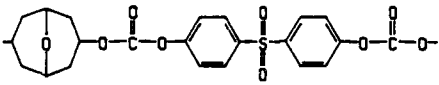
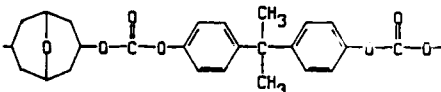
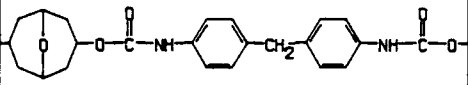
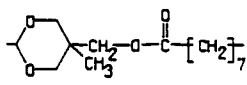
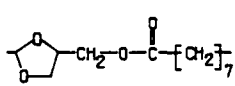
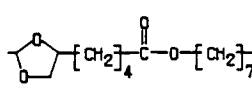
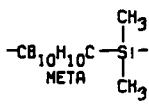
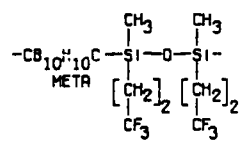
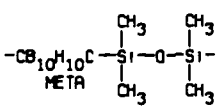
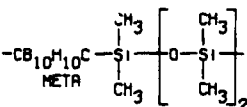
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 POLYMER 1546 T_g 447	 POLYMER 1545 T_g 457
 POLYMER 1548 T_g 463	 POLYMER 960 T_g 237
 POLYMER 958 T_g 240	 POLYMER 959 T_g 231
 POLYMER 1540 T_g 376	 POLYMER 1104 T_g 291
 POLYMER 510 T_g 298	 POLYMER 508 T_g 239

Table 1 (continued)

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$\text{POLYMER 1105 } T_g \text{ 260}$ $\text{---CB}_{10}\text{H}_{10}\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{[CH}_2\text{]}_2 \\ \\ \text{CF}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{[CH}_2\text{]}_2 \\ \\ \text{CF}_3 \end{array}$	$\text{POLYMER 509 } T_g \text{ 208}$ $\text{---CB}_{10}\text{H}_{10}\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CH}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CH}_3 \end{array}$
$\text{POLYMER 1542 } T_g \text{ 198}$ $\text{---CB}_{10}\text{H}_{10}\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CH}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CH}_3 \end{array}$	$\text{POLYMER 1544 } T_g \text{ 185}$ $\text{---CB}_{10}\text{H}_{10}\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CH}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CH}_3 \end{array}$
$\text{POLYMER 1541 } T_g \text{ 238}$ $\text{---CB}_{10}\text{H}_{10}\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CH}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CH}_3 \end{array}$	$\text{POLYMER 1103 } T_g \text{ 232}$ $\text{---CB}_5\text{H}_5\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CF}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CF}_3 \end{array}$
$\text{POLYMER 975 } T_g \text{ 206}$ $\text{---CB}_5\text{H}_5\text{C} \begin{array}{c} \text{CH}_3 \\ \\ \text{---Si---} \\ \\ \text{CH}_3 \end{array} \text{---O---Si---} \begin{array}{c} \text{CH}_3 \\ \\ \text{---} \\ \\ \text{CH}_3 \end{array}$	$\text{POLYMER 1094 } T_g \text{ 221}$ $\begin{array}{c} \text{O} \\ \\ \text{---O---P---O---CH}_2\text{---[CF}_2\text{]}_3\text{---CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{[CF}_2\text{]}_2 \\ \\ \text{O} \\ \\ \text{CF}_3 \end{array}$
$\text{POLYMER 1093 } T_g \text{ 221}$ $\begin{array}{c} \text{O} \\ \\ \text{---O---P---O---CH}_2\text{---[CF}_2\text{]}_3\text{---CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{[CF}_2\text{]}_3 \\ \\ \text{CF}_3 \end{array}$	$\text{POLYMER 1092 } T_g \text{ 224}$ $\begin{array}{c} \text{O} \\ \\ \text{---O---P---O---CH}_2\text{---[CF}_2\text{]}_3\text{---CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{[CF}_2\text{]}_2 \\ \\ \text{O} \\ \\ \text{CF}_3 \end{array}$
$\text{POLYMER 1091 } T_g \text{ 221}$ $\begin{array}{c} \text{O} \\ \\ \text{---O---P---O---CH}_2\text{---[CF}_2\text{]}_3\text{---CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CF}_2 \\ \\ \text{CF}_3 \end{array}$	$\text{POLYMER 1090 } T_g \text{ 221}$ $\begin{array}{c} \text{O} \\ \\ \text{---O---P---O---CH}_2\text{---[CF}_2\text{]}_3\text{---CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CF}_3 \end{array}$

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Table 1 (continued)

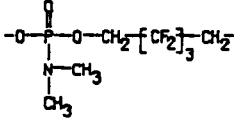
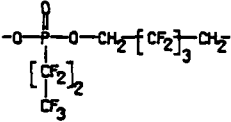
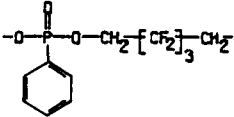
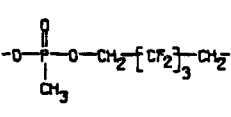
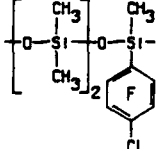
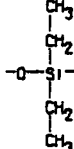
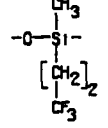
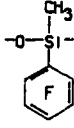
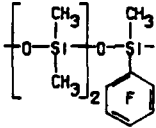
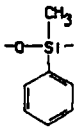
 POLYMER 1098 T_g 239	 POLYMER 1096 T_g 248
 POLYMER 1097 T_g 254	 POLYMER 1095 T_g 247
 POLYMER 804 T_g 198	 POLYMER 930 T_g 120
 POLYMER 560 T_g 190	 POLYMER 800 T_g 248
 POLYMER 803 T_g 190	 POLYMER 841 T_g 180
 POLYMER 837 T_g 146	 POLYMER 311 T_g 243

Table 1 (continued)

$-O-CH_2-$	$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_5 - \text{C}_6\text{H}_4 - O - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$
POLYMER 344 T _g 191	POLYMER 861 T _g 198
$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_5 - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$	$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_3 - \begin{array}{c} CH_3 \\ \\ O-Si- \\ \\ CH_3 \end{array} - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$
POLYMER 845 T _g 183	POLYMER 934 T _g 221
$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_4 - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$	$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_4 - \text{C}_6\text{H}_4 - O - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$
POLYMER 852 T _g 188	POLYMER 932 T _g 211
$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_4 - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$	$[-O-CH_2-]_3 [-CF_2-]_3 -CH_2-$
POLYMER 855 T _g 191	POLYMER 538 T _g 216
$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_3 - \text{C}_6\text{H}_4 - O - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$	$[-O-CH_2-]_2 - \text{C}_6\text{H}_4 - \text{C}(=\text{O}) - \text{O} - \text{C}(=\text{O}) - \text{C}_6\text{H}_4 -$
POLYMER 933 T _g 226	POLYMER 241 T _g 325
$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_3 \end{array} \right]_3 - \text{C}_6\text{H}_4 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_3 \end{array}$	$\left[\begin{array}{c} CH_3 \\ \\ -O-Si- \\ \\ CH_2 \\ \\ CF_3 \end{array} \right]_3 - [CH_2]_2 - [CF_2]_6 - [CH_2]_2 - \begin{array}{c} CH_3 \\ \\ Si- \\ \\ CH_2 \\ \\ CF_3 \end{array}$
POLYMER 865 T _g 201	POLYMER 1100 T _g 220

Table 1 (continued)

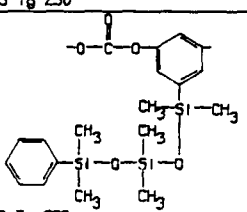
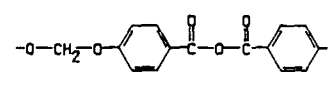
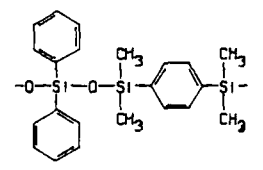
$\text{[-O-CH}_2\text{]}_2\text{-CH}_2$	$\text{-O-C(=O)-[O-CH}_2\text{]}_2\text{-}$
POLYMER 977 T_g 204	POLYMER 1114 T_g 246
$\text{-O-C(=O)-[O-CH}_2\text{]}_2\text{-}$	$\text{-O-C(=O)-[O-CH}_2\text{]}_2\text{-}$
POLYMER 1113 T_g 230	POLYMER 1112 T_g 228
	$\text{-O-C(=O)-O-CH}_2\text{-(CF}_2\text{)}_2\text{-CH}_2\text{-}$
POLYMER 1108 T_g 239	POLYMER 1402 T_g 255
$\text{-O-C(=O)-O-CH}_2\text{-}$	$\text{-O-C(=O)-O-CH}_2\text{-(CF}_2\text{)}_3\text{-CH}_2\text{-}$
POLYMER 1111 T_g 231	POLYMER 1109 T_g 236
$\text{-O-C(=O)-O-CH}_2\text{-}$	$\text{[-O-CH}_2\text{]}_2\text{-(CF}_2\text{)}_3\text{-CH}_2\text{-}$
POLYMER 1110 T_g 227	POLYMER 539 T_g 215
	
POLYMER 234 T_g 357	POLYMER 931 T_g 263

Table 1 (continued)

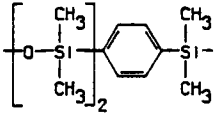
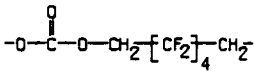
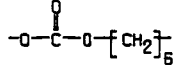
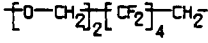
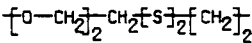
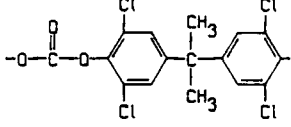
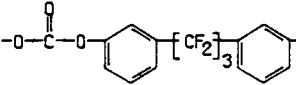
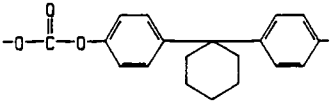
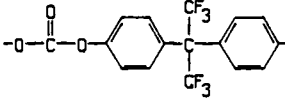
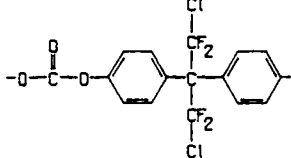
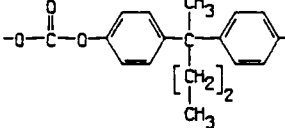
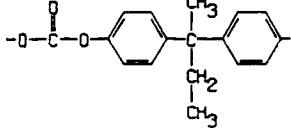
 POLYMER 863 T_g 200	 POLYMER 765 T_g 234
 POLYMER 957 T_g 220	 POLYMER 540 T_g 215
 POLYMER 870 T_g 214	 POLYMER 256 T_g 453
 POLYMER 260 T_g 319	 POLYMER 255 T_g 448
 POLYMER 570 T_g 439	 POLYMER 571 T_g 446
 POLYMER 1555 T_g 410	 POLYMER 252 T_g 407

Table 1 (continued)

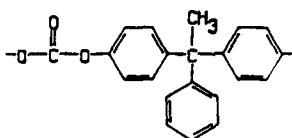
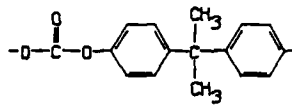
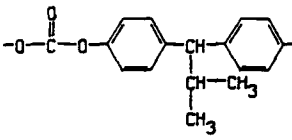
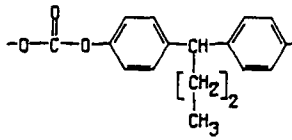
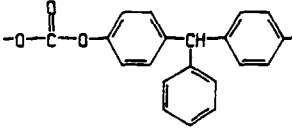
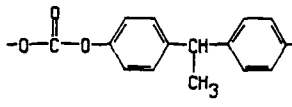
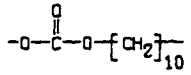
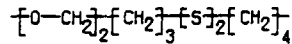
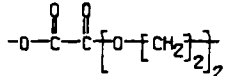
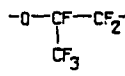
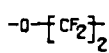
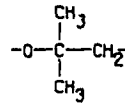
 POLYMER 258 T_g 449	 POLYMER 251 T_g 418
 POLYMER 254 T_g 422	 POLYMER 253 T_g 396
 POLYMER 257 T_g 394	 POLYMER 250 T_g 403
 POLYMER 1401 T_g 219	 POLYMER 849 T_g 197
 POLYMER 271 T_g 265	 POLYMER 1567 T_g 195
 POLYMER 750 T_g 215	 POLYMER 343 T_g 264

Table 1 (continued)

$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{C}_2\text{F}_4 \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_3\text{---C---CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CF---CF}_3 \\ \\ \text{CF}_3 \end{array}$
POLYMER 768 T_g 248	POLYMER 315 T_g 308	POLYMER 767 T_g 220
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \left[\begin{array}{c} \text{O} \\ \\ \text{CH}_2 \end{array} \right]_2 \\ \\ \text{CH}_2 \\ \\ \text{C} \equiv \text{N} \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH---Cl} \\ \\ \text{C} \equiv \text{N} \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \left[\text{CH}_2 \right]_5 \\ \\ \text{CH}_3 \end{array}$
POLYMER 1068 T_g 231	POLYMER 1067 T_g 244	POLYMER 843 T_g 185
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \left[\text{CH}_2 \right]_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \left[\text{CH}_2 \right]_2 \\ \\ \text{C} \equiv \text{N} \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{C} \equiv \text{N} \end{array}$
POLYMER 846 T_g 189	POLYMER 1069 T_g 235	POLYMER 1070 T_g 245
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH} \\ \\ \text{CH}_2 \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{O} \\ \\ \text{CH}_3 \end{array}$
POLYMER 847 T_g 195	POLYMER 866 T_g 207	POLYMER 864 T_g 206

Table 1 (continued)

$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{Cl---C---Cl} \\ \\ \text{Cl} \end{array}$ POLYMER 881 T_g 271	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ [\text{CH}_2]_9 \\ \\ \text{CH}_3 \end{array}$ POLYMER 317 T_g 232
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ [\text{CH}_2]_5 \\ \\ \text{CH}_3 \end{array}$ POLYMER 859 T_g 201	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ [\text{CH}_2]_3 \\ \\ \text{CH}_3 \end{array}$ POLYMER 857 T_g 198
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ [\text{CH}_2]_2 \\ \\ \text{C} \\ \\ \text{N} \end{array}$ POLYMER 1071 T_g 250	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{Cl} \end{array}$ POLYMER 880 T_g 246
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{Br} \end{array}$ POLYMER 879 T_g 254	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$ POLYMER 314 T_g 203
$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{C}_6\text{H}_5 \end{array}$ POLYMER 346 T_g 314	$\begin{array}{c} \text{---O---CH---CH}_2\text{---} \\ \\ \text{CH}_3 \end{array}$ POLYMER 345 T_g 198
$\text{---O---}[\text{CH}_2]_2\text{---}$ POLYMER 318 T_g 206	$\begin{array}{c} \text{---O---}[\text{CH}_2]_2\text{---O---C(=O)---NH---} \\ \\ \text{C}_6\text{H}_4 \\ \\ \text{O---CH}_2\text{---}[\text{CF}_2]_5\text{---CHF}_2 \end{array}$ POLYMER 883 T_g 195

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Table 1 (continued)

$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_3 \text{O}-\text{C}(=\text{O})-\text{NH}-\text{C}_6\text{H}_4-\text{NH}-\text{C}(=\text{O})-\text{O}-\text{CH}_2-\left[\text{CF}_2 \right]_5-\text{CHF}_2$ POLYMER 882 T_g 236	$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_3 \text{O}-\text{C}(=\text{O})-\text{NH}-\left[\text{CH}_2 \right]_6-\text{NH}-\text{C}(=\text{O})-$ POLYMER 928 T_g 250
$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}=\text{CH}-\text{C}(=\text{O})-$ POLYMER 893 T_g 265	$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}-\text{C}(=\text{O})-$ [CH₂]₈ CH₃ POLYMER 71 T_g 214
$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}-\text{C}(=\text{O})-$ [CH₂]₆ CH₃ POLYMER 70 T_g 215	$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}-\text{C}(=\text{O})-$ [CH₂]₄ CH₃ POLYMER 69 T_g 226
$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}-\text{C}(=\text{O})-$ [CH₂]₂ CH₃ POLYMER 68 T_g 235	$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}-\text{C}(=\text{O})-$ CH₃ POLYMER 227 T_g 244
$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\text{CH}_2-\text{C}(=\text{O})-$ POLYMER 267 T_g 244	$\left[\text{O}-\left[\text{CH}_2 \right]_2 \right]_2 \text{O}-\text{C}(=\text{O})-\left[\text{CH}_2 \right]_2-\text{C}(=\text{O})-$ POLYMER 262 T_g 244
$\begin{array}{c} \text{O}-\text{CF}(\text{CF}_3)-\text{CF}_2-\text{O}-\text{CF}(\text{CF}_3)-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_4-\text{C}(=\text{O})-\text{O}-\text{CH}_2-\text{CF}(\text{CF}_3)-\text{CF}_2-\text{O}-\left[\text{CF}_2 \right]_5-\text{O}-\text{CF}(\text{CF}_3)-\text{CF}_2-\text{O} \\ \text{POLYMER 1570 T}_{\text{g}} \text{ 249} \end{array}$	$\begin{array}{c} \text{O}-\text{CH}_2-\text{CF}_2-\text{O}-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_4-\text{C}(=\text{O})-\text{O}-\text{CH}_2-\text{O}-\left[\text{CH}_2 \right]_4-\text{CH}_3 \\ \text{POLYMER 829 T}_{\text{g}} \text{ 277} \end{array}$

Table 1 (continued)

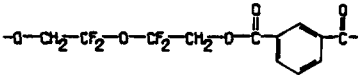
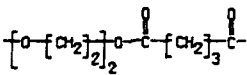
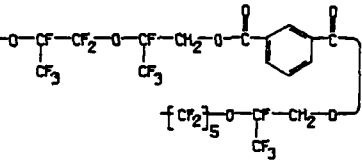
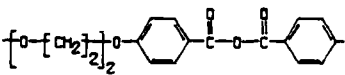
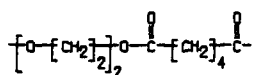
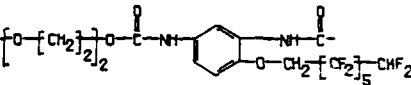
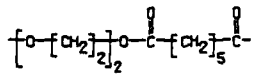
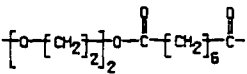
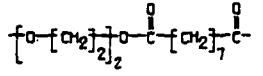
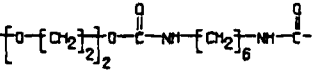
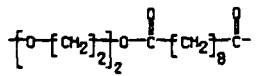
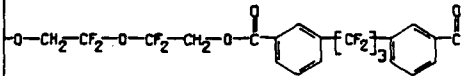
 POLYMER 743 T_g 293	 POLYMER 272 T_g 226
 POLYMER 1569 T_g 252	 POLYMER 242 T_g 314
 POLYMER 266 T_g 227	 POLYMER 884 T_g 283
 POLYMER 264 T_g 213	 POLYMER 270 T_g 212
 POLYMER 268 T_g 205	 POLYMER 927 T_g 267
 POLYMER 263 T_g 199	 POLYMER 599 T_g 299

Table 1 (continued)

$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--}[\text{CH}_2]_{10}\text{--C(=O)--}$	$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--}[\text{CH}_2]_{16}\text{--C(=O)--}$
POLYMER 265 T _g 202	POLYMER 269 T _g 205
$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--}[\text{CH}_2]_2\text{--C(=O)--}$	$\text{--O--CF(CF}_3\text{)--CH}_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--O--CH}_2\text{--CF(CF}_3\text{)--O--}[\text{CF}_2]_5\text{--}$
POLYMER 906 T _g 259	POLYMER 1568 T _g 265
$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$	$\text{--O--}[\text{CF}_2]_2\text{--}[\text{CH}_2]_2\text{--Si(CH}_3\text{)(CF}_3\text{)--O--Si(CH}_3\text{)(CF}_3\text{)--}[\text{CH}_2]_2\text{--}[\text{CF}_2]_2\text{--}$
POLYMER 274 T _g 324	POLYMER 1405 T _g 228
$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$	$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$
POLYMER 235 T _g 318	POLYMER 282 T _g 339
$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$	$\text{--O--}[\text{CH}_2]_2\text{--O--C(=O)--}[\text{CH}_2]_4\text{--C(=O)--}$
POLYMER 1031 T _g 281	POLYMER 277 T _g 231
$\text{--O--N--}[\text{CF}_2]_2\text{--N--}[\text{CF}_2]_7\text{--CF}_3$	$\text{--O--N--}[\text{CF}_2]_2\text{--N--}[\text{CF}_2]_2\text{--CF}_3$
POLYMER 1073 T _g 248	POLYMER 832 T _g 241

Table 1 (continued)

$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ [\text{CF}_2]_2 \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ [\text{CF}_2]_2 \\ \\ \text{Br} \end{array}$	$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ [\text{CF}_2]_2 \\ \\ \text{NO}_2 \end{array}$
POLYMER 834 T _g 225	POLYMER 771 T _g 251	POLYMER 833 T _g 231
$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ \text{CF}_2 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ \text{CF}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--O--N--}[\text{CF}_2]_2 \\ \\ \text{CF}_3 \end{array}$
POLYMER 835 T _g 221	POLYMER 770 T _g 238	POLYMER 431 T _g 219
$\text{--O--} \text{---} \text{C}_6\text{H}_4 \text{---}$	$\text{--O--C(=O)--}[\text{CH}_2]_2\text{---}$	$\text{--O--CH--}[\text{CH}_2]_2\text{---} \\ \\ \text{CH}_3$
POLYMER 1040 T _g 319	POLYMER 855 T _g 245	POLYMER 878 T _g 223
$\begin{array}{c} \text{Cl} \\ \\ \text{--O--CH}_2\text{--C--CH}_2\text{---} \\ \\ \text{CH}_2 \\ \\ \text{Cl} \end{array}$	$\text{--O--CH}_2\text{--CH--CH}_2\text{---} \\ \\ \text{CH}_3$	$\text{--O--}[\text{CH}_2]_3\text{---}$
POLYMER 316 T _g 265	POLYMER 873 T _g 218	POLYMER 429 T _g 195
$\begin{array}{c} \text{--O--CH}_2\text{--}[\text{CF}_2]_2\text{--O--}[\text{CF}_2]_2\text{---} \\ \\ \text{C(=O)--}[\text{CH}_2]_4\text{---C(=O)--O--CH}_2\text{---} \end{array}$	$\begin{array}{c} \text{--O--CH}_2\text{--CH--CH}_2\text{---O--C}_6\text{H}_4\text{---} \\ \\ \text{C(=O)--CH}_3 \end{array}$	$\text{--O--CH}_2\text{--CH--CH}_2\text{---O--C}_6\text{H}_4\text{---} \\ \\ \text{OH}$
POLYMER 1079 T _g 215	POLYMER 339 T _g 322	POLYMER 332 T _g 333
$\text{--O--}[\text{CH}_2]_3\text{---O--C}_6\text{H}_4\text{---C(=O)--O--C(=O)--C}_6\text{H}_4\text{---}$	$\begin{array}{c} \text{--O--CH}_2\text{--}[\text{CF}_2]_2\text{--O--}[\text{CF}_2]_4\text{---O--}[\text{CF}_2]_2\text{---} \\ \\ \text{C(=O)--NH--}[\text{CH}_2]_2\text{---O--}[\text{CH}_2]_2\text{---NH--C(=O)--CH}_2\text{---} \end{array}$	$\begin{array}{c} \text{--O--CH}_2\text{--}[\text{CF}_2]_2\text{---O--}[\text{CF}_2]_4\text{---O--} \\ \\ \text{CH}_2\text{---NH--C(=O)--O--CH}_2\text{---}[\text{CF}_2]_2\text{---} \\ \\ \text{---}[\text{CF}_2]_2\text{---O--}[\text{CF}_2]_2\text{---CH}_2\text{---NH--C(=O)--} \end{array}$
POLYMER 237 T _g 325	POLYMER 1081 T _g 223	POLYMER 1082 T _g 239

Table 1 (continued)

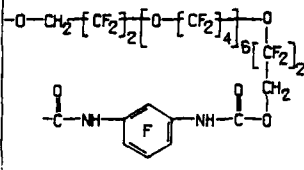
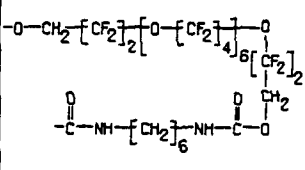
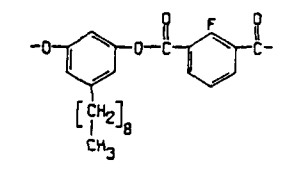
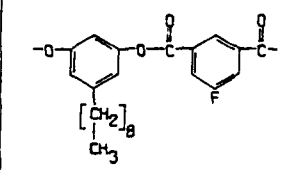
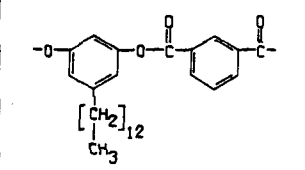
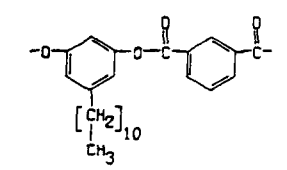
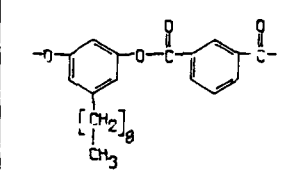
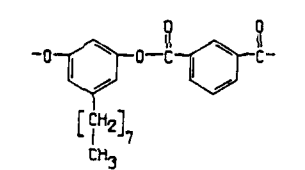
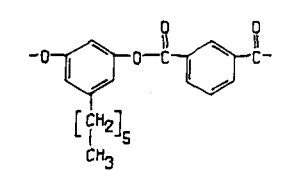
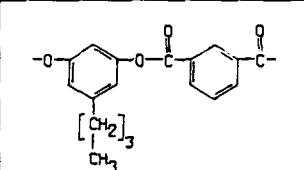
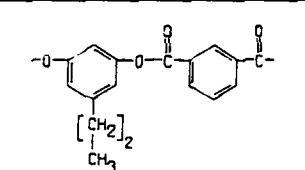
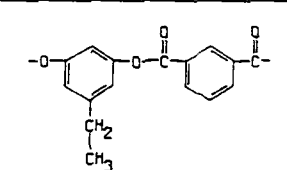
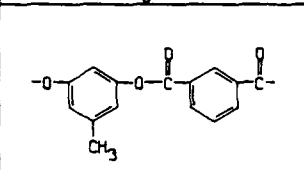
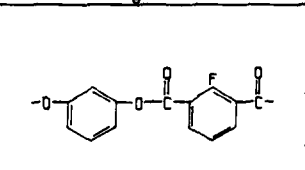
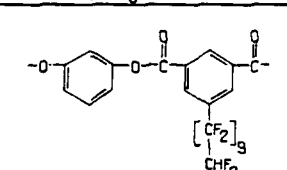
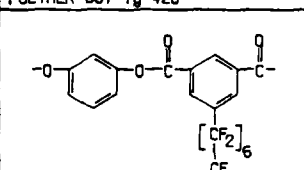
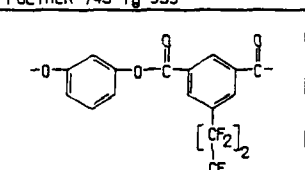
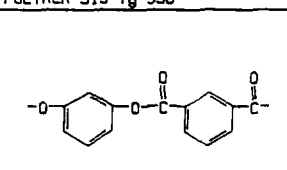
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 POLYMER 517 T_g 293	 POLYMER 424 T_g 291	 POLYMER 423 T_g 295
 POLYMER 422 T_g 304	 POLYMER 1119 T_g 314	 POLYMER 1118 T_g 335
 POLYMER 1117 T_g 353	 POLYMER 355 T_g 394	 POLYMER 421 T_g 395
 POLYMER 607 T_g 426	 POLYMER 745 T_g 393	 POLYMER 519 T_g 356
 POLYMER 520 T_g 374	 POLYMER 356 T_g 394	 POLYMER 608 T_g 411

Table 1 (continued)

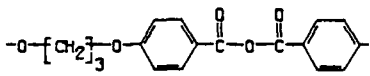
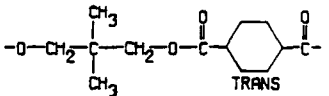
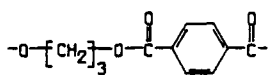
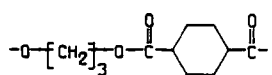
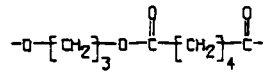
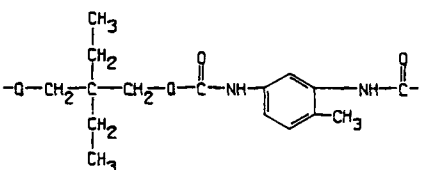
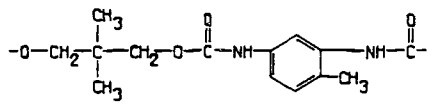
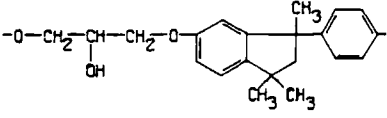
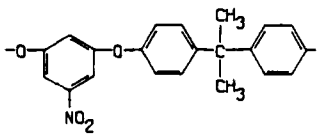
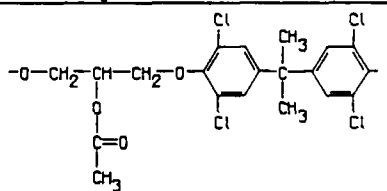
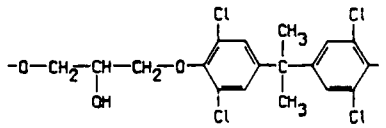
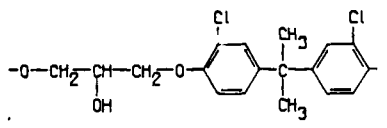
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 POLYMER 890 T_g 298	 POLYMER 902 T_g 262
 POLYMER 295 T_g 214	 POLYMER 868 T_g 203
 POLYMER 926 T_g 231	 POLYMER 335 T_g 393
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 POLYMER 334 T_g 388	 POLYMER 333 T_g 358

Table 1 (continued)

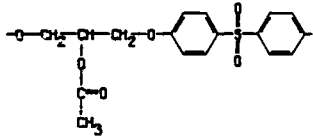
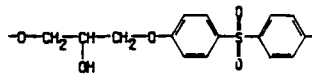
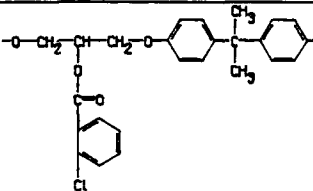
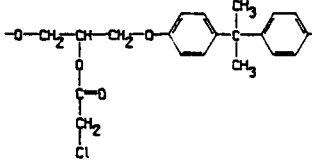
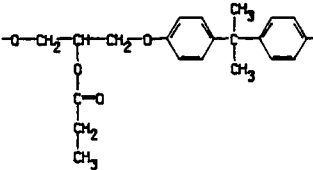
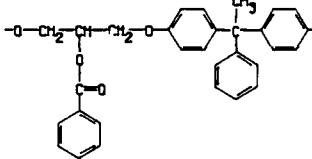
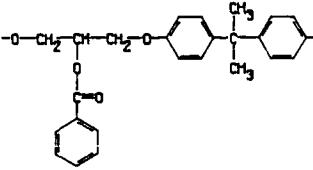
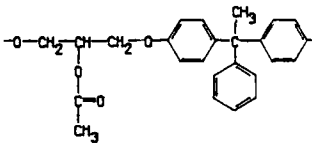
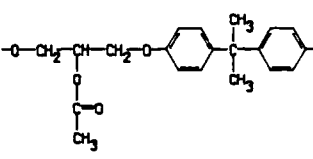
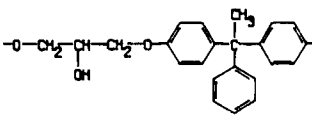
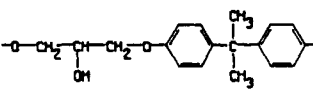
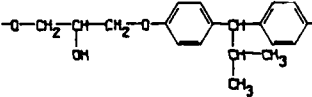
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 POLYMER 322 T_g 338	 POLYMER 341 T_g 383
 POLYMER 337 T_g 333	 POLYMER 327 T_g 388
 POLYMER 326 T_g 373	 POLYMER 325 T_g 368

Table 1 (continued)

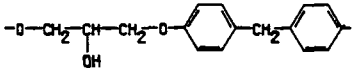
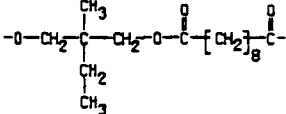
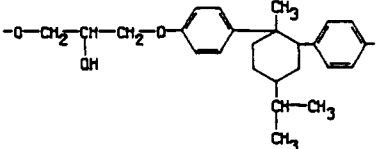
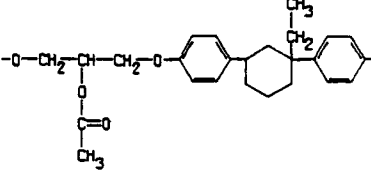
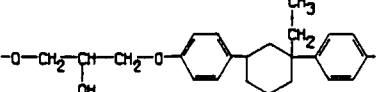
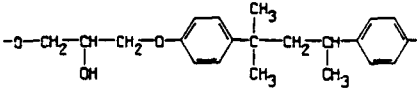
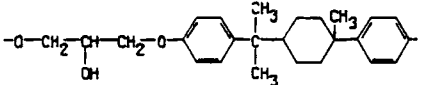
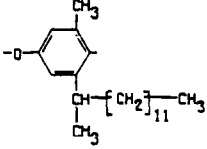
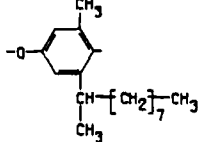
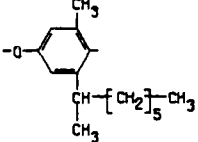
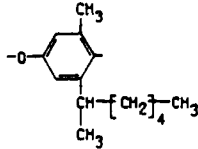
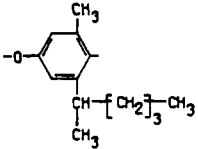
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 POLYMER 331 T_g 448	 POLYMER 342 T_g 386
 POLYMER 329 T_g 413	 POLYMER 323 T_g 348
 POLYMER 328 T_g 408	 POLYMER 1148 T_g 263
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Table 1 (continued)

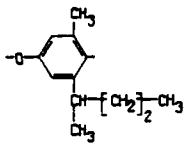
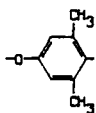
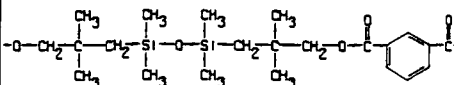
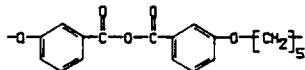
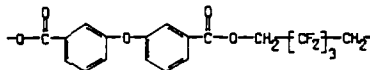
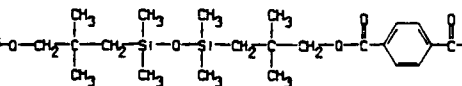
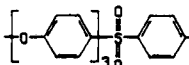
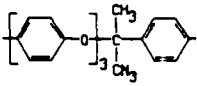
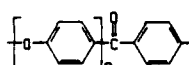
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 POLYMER 1412 T_g 348	 POLYMER 363 T_g 203
 POLYMER 347 T_g 188	 POLYMER 907 T_g 221
 POLYMER 240 T_g 334	 POLYMER 357 T_g 293
 POLYMER 601 T_g 238	 POLYMER 462 T_g 453
 POLYMER 1409 T_g 395	 POLYMER 460 T_g 423

Table 1 (continued)

$\text{--O--CH}_2\text{--}[\text{CF}_2]_2\text{--CH}_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$	$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$
POLYMER 1571 T_g 296	POLYMER 1033 T_g 280
$\text{--O--}[\text{CH}_2]_4\text{--O--C}_6\text{H}_4\text{--C(=O)--O--C(=O)--C}_6\text{H}_4\text{--}$	$\text{--O--}[\text{CF}_2]_4\text{--CH}_2\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--O--CH}_2\text{--}[\text{CF}_2]_4\text{--}$
POLYMER 238 T_g 348	POLYMER 1041 T_g 249
$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$	$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--C}_6\text{H}_4\text{--C(=O)--}$
POLYMER 892 T_g 280	POLYMER 901 T_g 258
$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--NH--C}_6\text{H}_3\text{(OCH}_2\text{--}[\text{CF}_2]_7\text{--CHF}_2\text{)--NH--C(=O)--}$	$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--NH--C}_6\text{H}_3\text{(OCH}_2\text{--}[\text{CF}_2]_5\text{--CHF}_2\text{)--NH--C(=O)--}$
POLYMER 1077 T_g 163	POLYMER 1076 T_g 177
$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--NH--C}_6\text{H}_3\text{(OCH}_2\text{--}[\text{CF}_2]_3\text{--CHF}_2\text{)--NH--C(=O)--}$	$\text{--O--}[\text{CH}_2]_4\text{--O--C(=O)--NH--C}_6\text{H}_3\text{(OCH}_2\text{--CF}_2\text{--CHF}_2\text{)--NH--C(=O)--}$
POLYMER 1075 T_g 193	POLYMER 1074 T_g 215
$\text{--O--C}_6\text{H}_4\text{--S(=O)}_2\text{--C}_6\text{H}_4\text{--}$	$\text{--O--C}_6\text{H}_4\text{--C(=O)--C}_6\text{H}_4\text{--}$
POLYMER 451 T_g 483	POLYMER 450 T_g 433

Table 1 (continued)

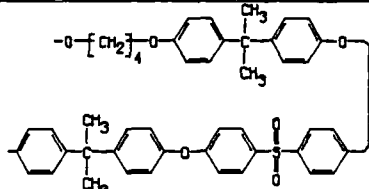
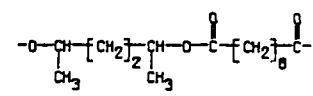
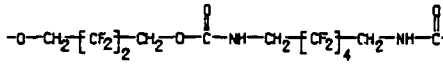
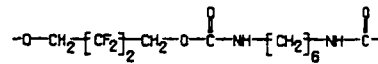
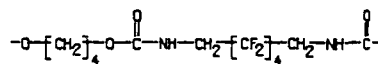
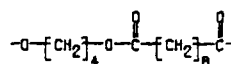
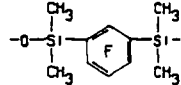
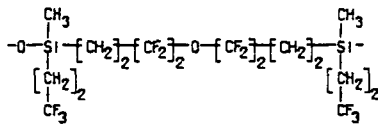
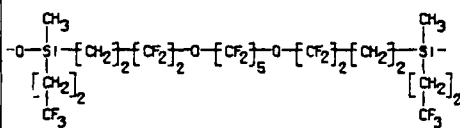
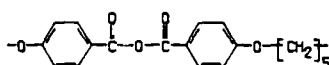
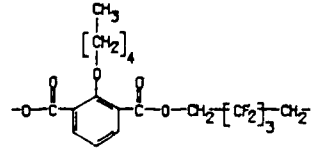
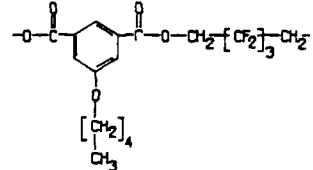
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 POLYMER 587 T_g 301	 POLYMER 593 T_g 272
 POLYMER 590 T_g 296	 POLYMER 295 T_g 216
 POLYMER 799 T_g 245	 POLYMER 1106 T_g 224
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 POLYMER 746 T_g 280	 POLYMER 748 T_g 233

Table 1 (continued)

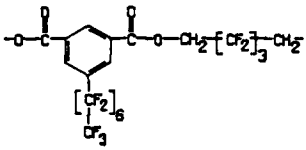
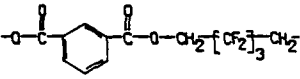
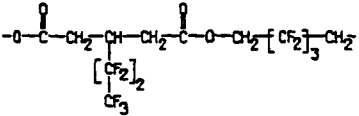
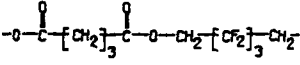
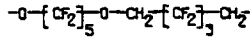
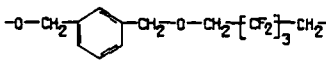
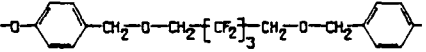
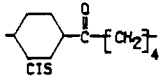
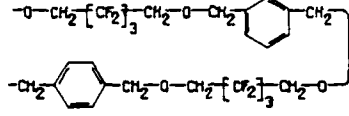
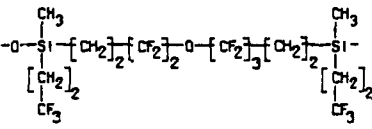
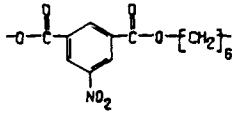
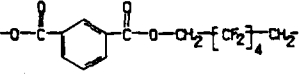
 POLYMER 559 T_g 293	 POLYMER 544 T_g 293
 POLYMER 505 T_g 248	 POLYMER 876 T_g 221
 POLYMER 1566 T_g 206	 POLYMER 514 T_g 233
 POLYMER 512 T_g 260	 POLYMER 894 T_g 216
 POLYMER 1078 T_g 231	 POLYMER 1404 T_g 229
 POLYMER 1038 T_g 323	 POLYMER 1572 T_g 283

Table 1 (continued)

$\begin{array}{c} \text{O} \quad \text{O} \\ \parallel \quad \parallel \\ -\text{O}-\text{C}-\text{CH}_2-\text{CH}-\text{CH}_2-\text{C}-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2- \\ \\ \text{CF}_2 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{O} \quad \text{O} \\ \parallel \quad \parallel \\ -\text{O}-\text{C}-\text{CF}_2-\text{C}-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2- \\ \\ \text{CF}_3 \end{array}$
POLYMER 904 T_g 248	POLYMER 877 T_g 221
$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{CF}_2-\text{C}(=\text{O})-$	$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{CF}_2-\text{C}(=\text{O})-$
POLYMER 908 T_g 218	POLYMER 308 T_g 216
$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{C}_6\text{H}_4-\text{CH}_2-$	$-\text{O}-\text{CF}_2-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_4-\text{C}(=\text{O})-$
POLYMER 541 T_g 242	POLYMER 891 T_g 273
$-\text{O}-\text{CF}_2-\text{O}-\text{C}(=\text{O})-\text{CF}_2-\text{C}(=\text{O})-$	$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}_6\text{H}_4-\text{C}_6\text{H}_4-$
POLYMER 287 T_g 204	POLYMER 602 T_g 304
$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_4-\text{C}(=\text{O})-$	$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{CH}_2-\text{S}-\text{CF}_2-\text{S}-\text{CH}_2-\text{C}(=\text{O})-$
POLYMER 309 T_g 318	POLYMER 910 T_g 233
$-\text{O}-\text{CH}_2-\text{CF}_2-\text{CH}_2-\text{O}-\text{C}(=\text{O})-\text{CF}_2-\text{C}(=\text{O})-$	$-\text{O}-\text{C}(=\text{O})-\text{C}_6\text{H}_4-\text{C}(=\text{O})-\text{O}-\text{C}_6\text{H}_4-\text{C}_6\text{H}_4-\text{C}_6\text{H}_4-$
POLYMER 1085 T_g 198	POLYMER 297 T_g 400

Table 1 (continued)

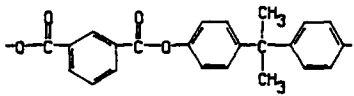
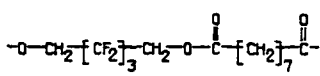
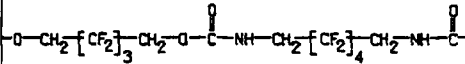
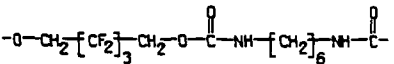
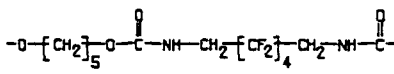
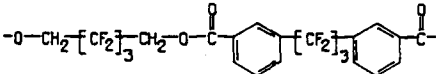
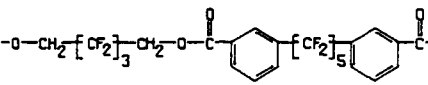
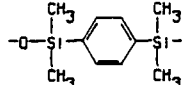
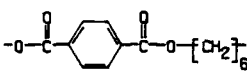
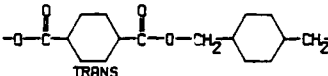
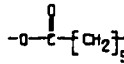
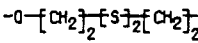
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 POLYMER 586 T_g 288	 POLYMER 592 T_g 279
 POLYMER 589 T_g 296	 POLYMER 310 T_g 290
 POLYMER 360 T_g 289	 POLYMER 929 T_g 256
 POLYMER 284 T_g 264	 POLYMER 1560 T_g 315
 POLYMER 896 T_g 202	 POLYMER 914 T_g 220

Table 1 (continued)

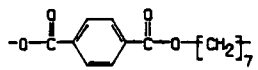
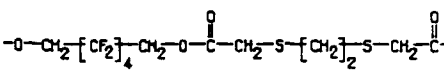
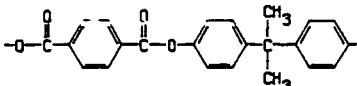
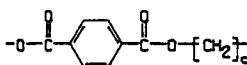
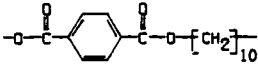
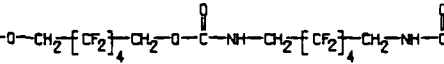
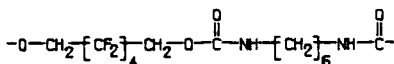
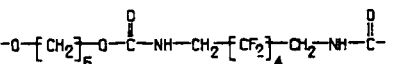
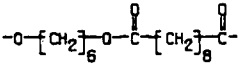
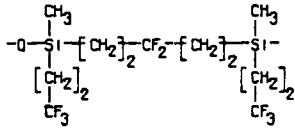
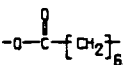
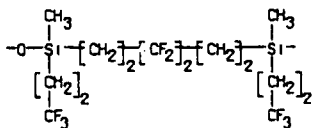
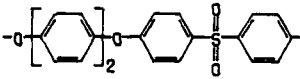
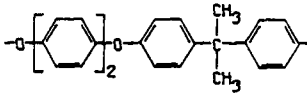
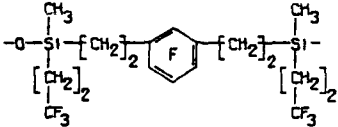
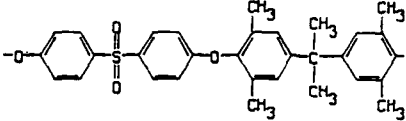
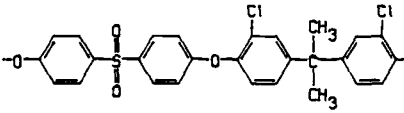
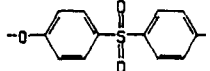
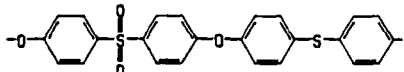
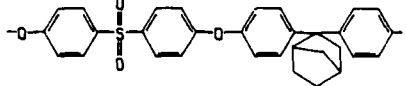
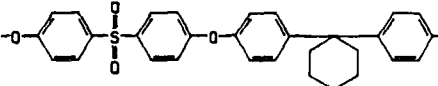
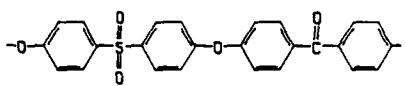
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 POLYMER 440 T_g 477	 POLYMER 1558 T_g 260
 POLYMER 1029 T_g 258	 POLYMER 595 T_g 293
 POLYMER 591 T_g 261	 POLYMER 588 T_g 268
 POLYMER 1048 T_g 201	 POLYMER 811 T_g 225
 POLYMER 897 T_g 228	 POLYMER 810 T_g 236

Table 1 (continued)

$-O-C(=O)-[CH_2]_7-$	$-O-[CH_2]_2-[S]_4-[CH_2]_2-$
POLYMER 899 T _g 235	POLYMER 915 T _g 233
	
POLYMER 466 T _g 503	POLYMER 1410 T _g 427
	
POLYMER 1101 T _g 232	POLYMER 447 T _g 503
	
POLYMER 448 T _g 478	POLYMER 465 T _g 501
	
POLYMER 463 T _g 448	POLYMER 470 T _g 523
	
POLYMER 468 T _g 478	POLYMER 464 T _g 478

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Table 1 (continued)

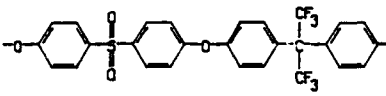
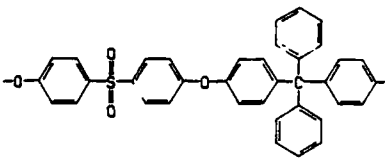
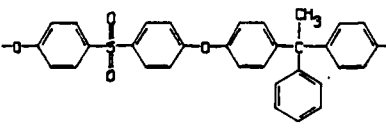
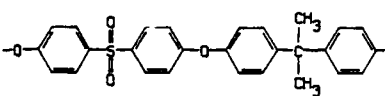
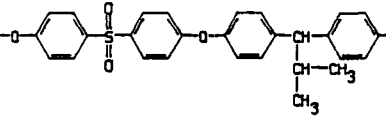
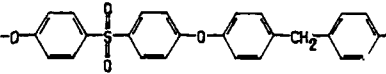
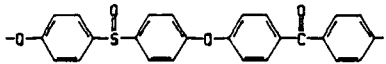
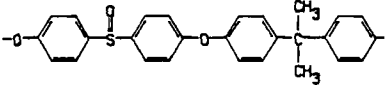
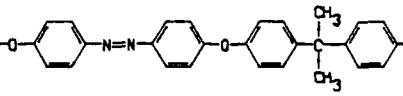
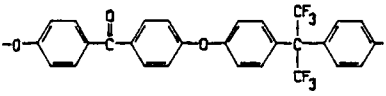
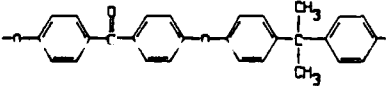
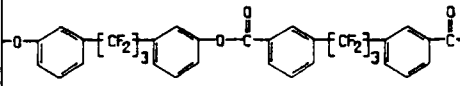
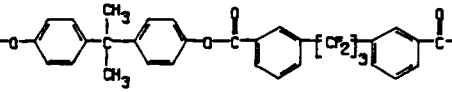
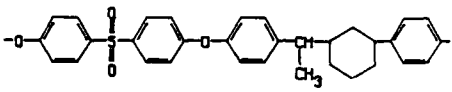
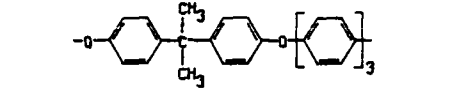
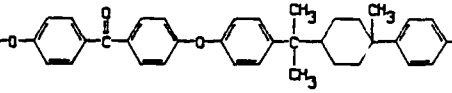
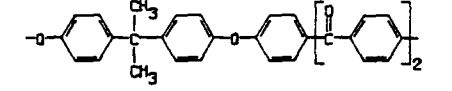
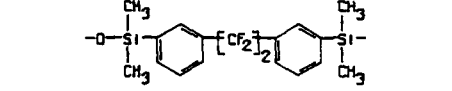
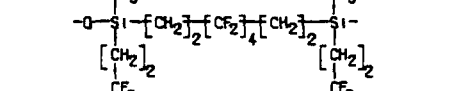
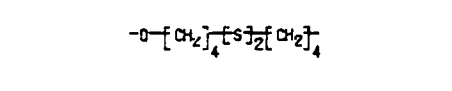
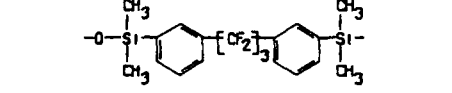
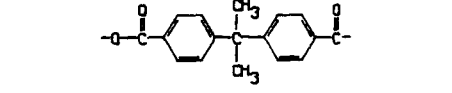
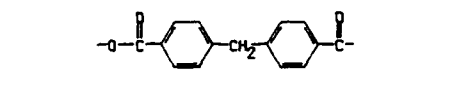
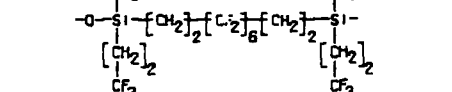
 POLYMER 473 T_g 478	 POLYMER 467 T_g 503
 POLYMER 471 T_g 473	 POLYMER 472 T_g 449
 POLYMER 475 T_g 473	 POLYMER 474 T_g 453
 POLYMER 459 T_g 478	 POLYMER 454 T_g 438
 POLYMER 456 T_g 448	 POLYMER 457 T_g 448
 POLYMER 461 T_g 428	 POLYMER 307 T_g 345

Table 1 (continued)

 POLYMER 361 T_g 389	 POLYMER 469 T_g 503
 POLYMER 1411 T_g 455	 POLYMER 458 T_g 473
 POLYMER 455 T_g 438	 POLYMER 605 T_g 263
 POLYMER 809 T_g 238	 POLYMER 850 T_g 197
 POLYMER 521 T_g 260	 POLYMER 246 T_g 333
 POLYMER 243 T_g 395	 POLYMER 808 T_g 239

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Table 1 (continued)

$\begin{array}{c} \text{CH}_3 \\ \\ -\text{O}-\text{Si}-[\text{CH}_2]_2-[\text{CF}_2]_2-[\text{CH}_2-\text{CF}_2]_2-[\text{CH}_2]_2-\text{Si}- \\ \qquad \qquad \qquad \\ [\text{CH}_2]_2 \qquad \qquad \qquad [\text{CH}_2]_2 \\ \qquad \qquad \qquad \\ \text{CF}_3 \qquad \qquad \qquad \text{CF}_3 \end{array}$	$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-[\text{CH}_2]_{11}$
POLYMER 1099 T_g 239	POLYMER 900 T_g 248
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{O}-\text{Si}-\text{C}_6\text{H}_4-[\text{CF}_2]_3-\text{C}_6\text{H}_4-\text{Si}- \\ \qquad \qquad \qquad \\ \text{CH}_3 \qquad \qquad \qquad \text{CH}_3 \end{array}$	$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_6\text{H}_4-[\text{CF}_2]_3-\text{C}_6\text{H}_4-\overset{\text{O}}{\parallel}{\text{C}}-$
POLYMER 1102 T_g 251	POLYMER 248 T_g 371
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{O}-\text{Si}-[\text{CH}_2]_2-[\text{CF}_2]_8-[\text{CH}_2]_2-\text{Si}- \\ \qquad \qquad \qquad \\ [\text{CH}_2]_2 \qquad \qquad \qquad [\text{CH}_2]_2 \\ \qquad \qquad \qquad \\ \text{CF}_3 \qquad \qquad \qquad \text{CF}_3 \end{array}$	$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_6\text{H}_4-[\text{CH}_2]_4-\text{C}_6\text{H}_4-\overset{\text{O}}{\parallel}{\text{C}}-$
POLYMER 807 T_g 235	POLYMER 244 T_g 319
$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-[\text{CH}_2]_{14}$	$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_6\text{H}_4-[\text{CH}_2]_5-\text{C}_6\text{H}_4-\overset{\text{O}}{\parallel}{\text{C}}-$
POLYMER 898 T_g 251	POLYMER 245 T_g 312
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{O}-\text{Si}-[\text{CH}_2]_2-[\text{CF}_2]_{10}-[\text{CH}_2]_2-\text{Si}- \\ \qquad \qquad \qquad \\ [\text{CH}_2]_2 \qquad \qquad \qquad [\text{CH}_2]_2 \\ \qquad \qquad \qquad \\ \text{CF}_3 \qquad \qquad \qquad \text{CF}_3 \end{array}$	$-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-\text{C}_6\text{H}_4-\text{S}-[\text{CH}_2]_4-\text{S}-\text{C}_6\text{H}_4-\overset{\text{O}}{\parallel}{\text{C}}-$
POLYMER 806 T_g 252	POLYMER 247 T_g 335
$[\text{S}]_4[\text{CH}_2]_2$	$[\text{S}]_4\text{CH}_2-\text{C}_6\text{H}_4-\text{CH}_2$
POLYMER 920 T_g 249	POLYMER 922 T_g 266

Table 1 (continued)

$\text{[s]}_4\text{[CH}_2\text{]}_{10}$	$\text{[s]}_3\text{[CH}_2\text{]}_{10}$	$\text{[s]}_2\text{[CH}_2\text{]}_2$	$\text{[s]}_2\text{[CH}_2\text{]}_5$
POLYMER 851 T _g 187	POLYMER 858 T _g 193	POLYMER 919 T _g 246	POLYMER 854 T _g 201
$\text{[s]}_2\text{CH}_2\text{-C}_6\text{H}_4\text{-CH}_2$	$\text{[s]}_2\text{[CH}_2\text{]}_6$	$\text{[s]}_2\text{[CH}_2\text{]}_{10}$	$\text{-S-CF}_2\text{-}$
POLYMER 921 T _g 286	POLYMER 853 T _g 199	POLYMER 860 T _g 198	POLYMER 534 T _g 155
$\text{-S-CH(CH}_3\text{)-C(=O)-}$	$\text{-S-CH(CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{)-}$	$\text{-S-CH(CH}_2\text{CH}_2\text{CH}_3\text{)-}$	$\text{-S-CH(CH}_3\text{)-CH}_2\text{-}$
POLYMER 1557 T _g 275	POLYMER 867 T _g 213	POLYMER 874 T _g 218	POLYMER 917 T _g 226
$\text{-S-[CH}_2\text{]}_2\text{-}$	$\text{-S-C}_6\text{H}_{11}\text{-}$	$\text{-S-CH(CH}_3\text{)-[CH}_2\text{]}_2\text{-}$	$\text{-S-CH}_2\text{-C(CH}_3\text{)}_2\text{-CH}_2\text{-}$
POLYMER 875 T _g 218	POLYMER 923 T _g 211	POLYMER 871 T _g 204	POLYMER 924 T _g 213
$\text{-S-CH}_2\text{-C(CH}_3\text{)}_2\text{-CH}_2\text{-}$	$\text{-S-[CH}_2\text{]}_3\text{-}$	$\text{-S-C(=O)-[CH}_2\text{]}_4\text{-}$	$\text{-S-C(=O)-[CH}_2\text{]}_5\text{-C(=O)-}$
POLYMER 918 T _g 223	POLYMER 916 T _g 228	POLYMER 925 T _g 282	POLYMER 1561 T _g 282
$\text{Cl-C}_6\text{H}_3\text{(Cl)-O-P(=O)(Cl)-O-C}_6\text{H}_3\text{(Cl)-Cl}$	$\text{CF}_3\text{-C}_6\text{H}_3\text{(CF}_3\text{)-O-P(=O)(CF}_3\text{)-O-C}_6\text{H}_3\text{(CF}_3\text{)-CF}_3$	$\text{Cl-C}_6\text{H}_3\text{(Cl)-O-P(=O)(Cl)-O-C}_6\text{H}_3\text{(Cl)-Cl}$	$\text{CH}_3\text{-C}_6\text{H}_3\text{(CH}_3\text{)-O-P(=O)(CH}_3\text{)-O-C}_6\text{H}_3\text{(CH}_3\text{)-CH}_3$
POLYMER 935 T _g 265	POLYMER 761 T _g 228	POLYMER 1051 T _g 239	POLYMER 1054 T _g 243

Table 1 (continued)

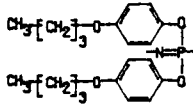
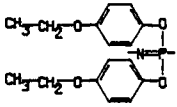
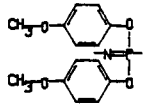
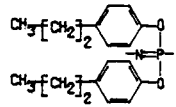
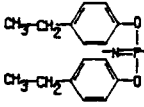
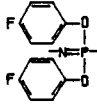
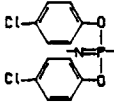
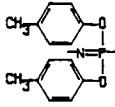
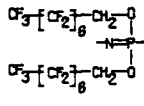
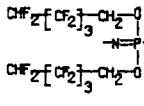
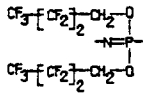
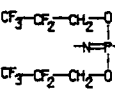
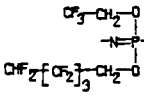
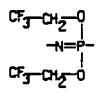
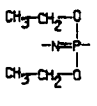
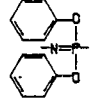
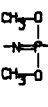
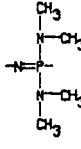
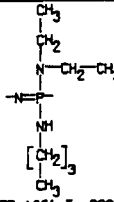
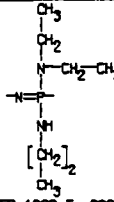
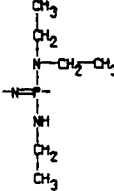
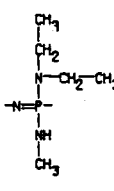
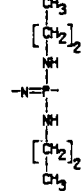
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 POLYMER 1053 T_g 244	 POLYMER 750 T_g 254	 POLYMER 936 T_g 256	 POLYMER 1154 T_g 265
 POLYMER 782 T_g 223	 POLYMER 1066 T_g 210	 POLYMER 1065 T_g 207	 POLYMER 758 T_g 190
 POLYMER 1107 T_g 203	 POLYMER 558 T_g 203	 POLYMER 842 T_g 179	 POLYMER 938 T_g 287
 POLYMER 848 T_g 187	 POLYMER 940 T_g 259	 POLYMER 1061 T_g 262	 POLYMER 1063 T_g 263
 POLYMER 1060 T_g 257	 POLYMER 1120 T_g 276	 POLYMER 1064 T_g 271	 POLYMER 760 T_g 208

Table 1 (continued)

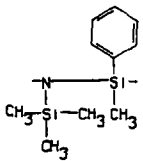
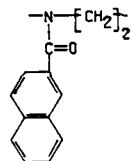
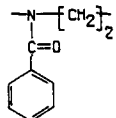
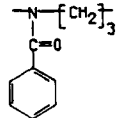
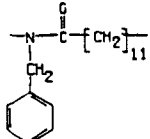
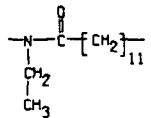
$\text{--N=PF}_2\text{--}$	$\begin{array}{c} \text{Cl} \\ \\ \text{--N=P--} \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{Br} \\ \\ \text{--N=P--} \\ \\ \text{Br} \end{array}$	
POLYMER 1047 T _g 167	POLYMER 962 T _g 204	POLYMER 1062 T _g 258	POLYMER 946 T _g 223
$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{CH--CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{CH--CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_{16} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_{10} \\ \\ \text{CH}_3 \end{array}$
POLYMER 497 T _g 303	POLYMER 500 T _g 303	POLYMER 1142 T _g 283	POLYMER 1141 T _g 283
$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_6 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_5 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_4 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_3 \\ \\ \text{CH}_3 \end{array}$
POLYMER 1140 T _g 283	POLYMER 1139 T _g 283	POLYMER 501 T _g 283	POLYMER 498 T _g 286
$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$		
POLYMER 496 T _g 303	POLYMER 495 T _g 343	POLYMER 503 T _g 403	POLYMER 502 T _g 378
$\begin{array}{c} \text{--N--[CH}_2\text{]}_2\text{--} \\ \\ \text{C=O} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_3\text{--} \\ \\ \text{C=O} \\ \\ \text{[CF}_2\text{]}_6 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_3\text{--} \\ \\ \text{C=O} \\ \\ \text{[CH}_2\text{]}_4 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{--N--[CH}_2\text{]}_3\text{--} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$
POLYMER 494 T _g 353	POLYMER 507 T _g 298	POLYMER 506 T _g 257	POLYMER 505 T _g 281
	$\begin{array}{c} \text{--N--[CH}_2\text{]}_3\text{--} \\ \\ \text{C=O} \\ \\ \text{CH}_3 \end{array}$		
POLYMER 499 T _g 345	POLYMER 504 T _g 303	POLYMER 963 T _g 241	POLYMER 962 T _g 225

Table 1 (continued)

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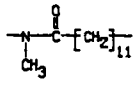
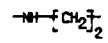
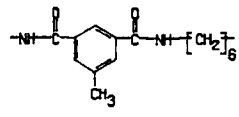
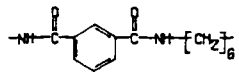
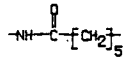
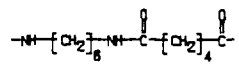
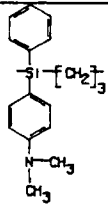
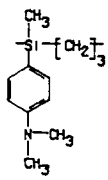
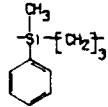
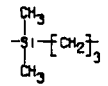
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 POLYMER 941 T_g 240	 POLYMER 426 T_g 383
 POLYMER 425 T_g 390	 POLYMER 686 T_g 325
 POLYMER 687 T_g 323	 POLYMER 942 T_g 173
 POLYMER 945 T_g 325	 POLYMER 944 T_g 267
 POLYMER 1042 T_g 243	 POLYMER 656 T_g 203

Table 1 (continued)

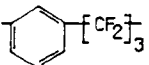
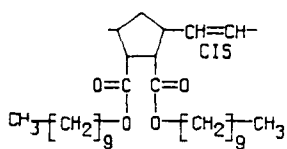
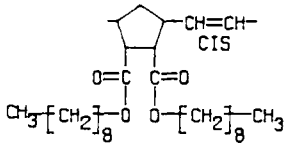
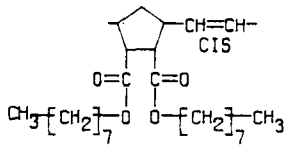
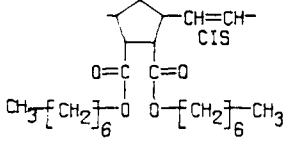
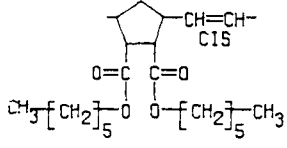
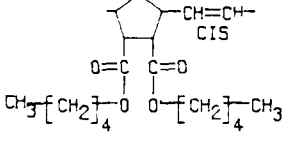
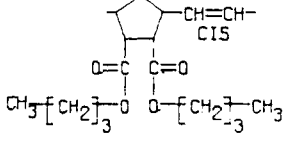
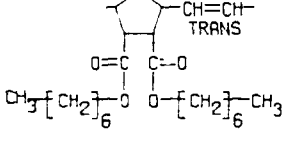
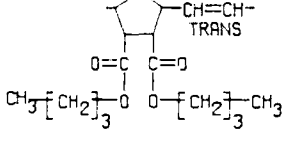
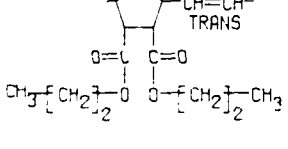
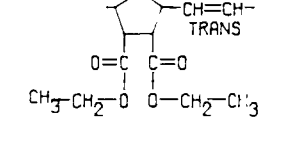
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 POLYMER 1010 T_g 175	 POLYMER 1009 T_g 180
 POLYMER 1116 T_g 188	 POLYMER 1007 T_g 198
 POLYMER 1006 T_g 228	 POLYMER 976 T_g 245
 POLYMER 1008 T_g 188	 POLYMER 1115 T_g 237
 POLYMER 1005 T_g 263	 POLYMER 1004 T_g 228

Table 1 (continued)

POLYMER 1013 T_g 188	POLYMER 1023 T_g 187
POLYMER 1022 T_g 202	POLYMER 1021 T_g 216
POLYMER 1020 T_g 203	POLYMER 1018 T_g 195
POLYMER 1019 T_g 201	POLYMER 1017 T_g 188
POLYMER 1016 T_g 188	POLYMER 1015 T_g 233
POLYMER 1014 T_g 253	POLYMER 1012 T_g 243

Table 1 (continued)

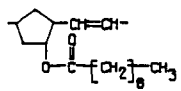
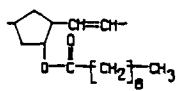
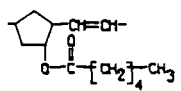
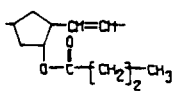
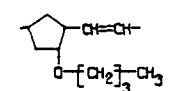
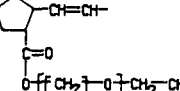
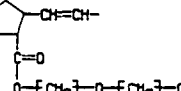
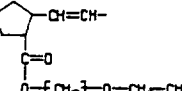
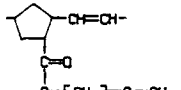
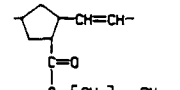
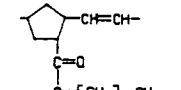
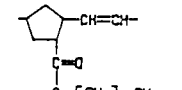
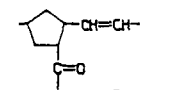
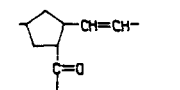
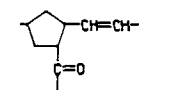
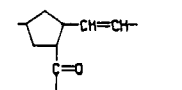
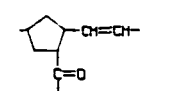
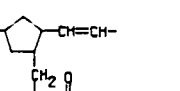
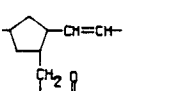
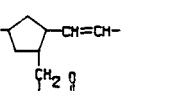
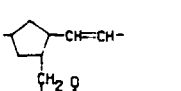
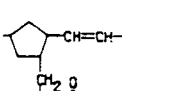
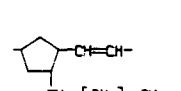
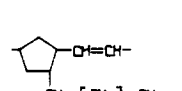
 POLYMER 994 T_g 222	 POLYMER 993 T_g 220	 POLYMER 992 T_g 213	 POLYMER 991 T_g 270
 POLYMER 992 T_g 254	 POLYMER 1003 T_g 229	 POLYMER 995 T_g 228	 POLYMER 1002 T_g 253
 POLYMER 1001 T_g 263	 POLYMER 990 T_g 216	 POLYMER 989 T_g 218	 POLYMER 988 T_g 210
 POLYMER 987 T_g 220	 POLYMER 986 T_g 244	 POLYMER 985 T_g 237	 POLYMER 984 T_g 245
 POLYMER 983 T_g 270	 POLYMER 1000 T_g 243	 POLYMER 999 T_g 213	 POLYMER 998 T_g 233
 POLYMER 997 T_g 235	 POLYMER 996 T_g 263	 POLYMER 981 T_g 212	 POLYMER 980 T_g 225

Table 1 (continued)

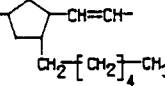
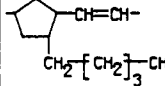
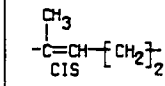
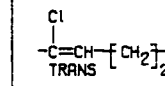
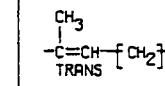
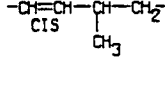
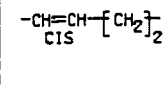
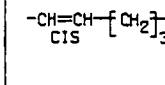
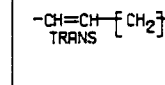
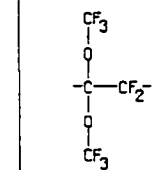
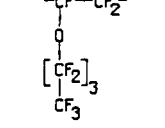
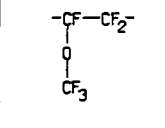
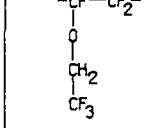
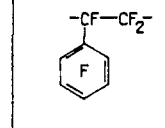
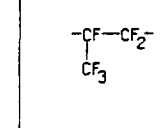
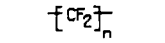
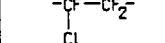
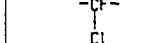
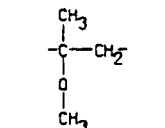
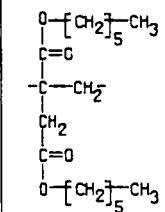
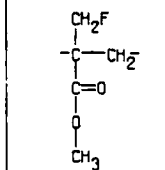
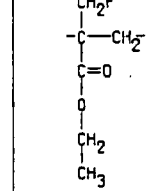
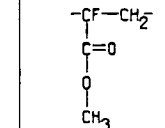
				
POLYMER 979 T _g 246	POLYMER 978 T _g 251	POLYMER 622 T _g 200	POLYMER 618 T _g 233	POLYMER 623 T _g 215
				
POLYMER 726 T _g 226	POLYMER 614 T _g 171	POLYMER 742 T _g 163	POLYMER 625 T _g 173	POLYMER 531 T _g 203
				
POLYMER 525 T _g 258	POLYMER 533 T _g 258	POLYMER 532 T _g 298	POLYMER 596 T _g 457	POLYMER 226 T _g 420
				
POLYMER 225 T _g 400	POLYMER 199 T _g 303	POLYMER 569 T _g 345	POLYMER 523 T _g 258	POLYMER 524 T _g 258
				
POLYMER 386 T _g 340	POLYMER 947 T _g 269	POLYMER 491 T _g 363	POLYMER 492 T _g 316	POLYMER 582 T _g 404

Table 1 (continued)

POLYMER 484 T _g 405	POLYMER 60 T _g 315	POLYMER 67 T _g 329	POLYMER 63 T _g 351	POLYMER 66 T _g 398
POLYMER 1057 T _g 251	POLYMER 56 T _g 378	POLYMER 128 T _g 401	POLYMER 58 T _g 428	POLYMER 44 T _g 381
POLYMER 108 T _g 338	POLYMER 43 T _g 331	POLYMER 50 T _g 354	POLYMER 477 T _g 278	POLYMER 476 T _g 305
POLYMER 478 T _g 329	POLYMER 46 T _g 283	POLYMER 430 T _g 348	POLYMER 48 T _g 327	POLYMER 1058 T _g 285
POLYMER 383 T _g 298	POLYMER 111 T _g 292	POLYMER 382 T _g 292	POLYMER 970 T _g 274	POLYMER 118 T _g 218

Table 1 (continued)

$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_5 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_4 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_2 \\ \\ \text{Br} \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_2 \\ \\ \text{C} \equiv \text{N} \end{array}$
POLYMER 116 T _g 268	POLYMER 115 T _g 268	POLYMER 42 T _g 293	POLYMER 380 T _g 325	POLYMER 57 T _g 364
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_2 \\ \\ \text{C}_6\text{H}_5 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ [\text{CH}_2]_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{C}_6\text{H}_5 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ \text{C}_6\text{H}_5 \end{array}$
POLYMER 59 T _g 299	POLYMER 54 T _g 308	POLYMER 55 T _g 327	POLYMER 47 T _g 338	POLYMER 53 T _g 383
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ \text{C}_6\text{H}_{11} \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{O} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{C}=\text{O} \\ \\ \text{NH} \\ \\ \text{CH}_3-\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} -\text{CF}-\text{CH}_2- \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$
POLYMER 45 T _g 380	POLYMER 52 T _g 378	POLYMER 703 T _g 433	POLYMER 535 T _g 310	POLYMER 709 T _g 268
$-\text{CF}_2-\text{CH}_2-$	$\begin{array}{c} \text{Cl} \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-\text{CH}_2- \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-[\text{CH}_2]_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-[\text{CH}_2]_3 \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$
POLYMER 223 T _g 233	POLYMER 952 T _g 255	POLYMER 231 T _g 200	POLYMER 232 T _g 263	POLYMER 707 T _g 258
$\begin{array}{c} \text{CH}_3 \\ \\ -\text{C}-[\text{CH}_2]_3 \\ \\ \text{CH}_3 \end{array}$	SYNDIOTACTIC $\begin{array}{c} -\text{CH}-\text{CH}_2- \\ \\ \text{CH} \\ \\ \text{CH}_2 \end{array}$	$\text{F}-\text{CH}-$	$\begin{array}{c} -\text{CH}-\text{CH}-[\text{CH}_2]_5 \\ \quad \\ \text{Cl} \quad \text{Cl} \end{array}$	$\begin{array}{c} -\text{CH}-\text{CH}-[\text{CH}_2]_6 \\ \quad \\ \text{Cl} \quad \text{Cl} \end{array}$
POLYMER 1043 T _g 258	POLYMER 911 T _g 245	POLYMER 222 T _g 356	POLYMER 353 T _g 246	POLYMER 954 T _g 245

Table 1 (continued)

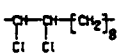
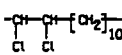
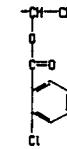
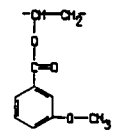
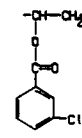
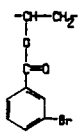
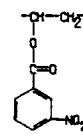
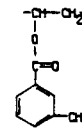
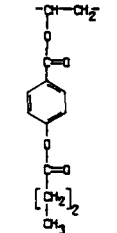
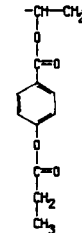
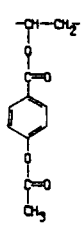
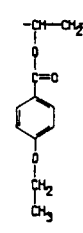
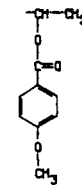
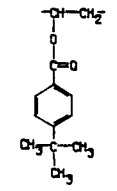
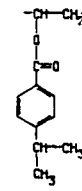
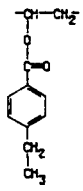
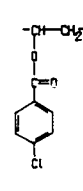
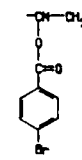
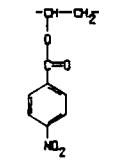
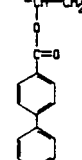
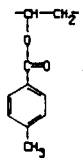
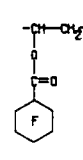
 POLYMER 955 T_g 233	 POLYMER 956 T_g 231	 POLYMER 411 T_g 333	 POLYMER 407 T_g 338	 POLYMER 400 T_g 335
 POLYMER 403 T_g 321	 POLYMER 408 T_g 317	 POLYMER 401 T_g 338	 POLYMER 396 T_g 331	 POLYMER 414 T_g 366
 POLYMER 404 T_g 324	 POLYMER 398 T_g 334	 POLYMER 416 T_g 342	 POLYMER 412 T_g 348	 POLYMER 410 T_g 343
 POLYMER 409 T_g 360	 POLYMER 399 T_g 374	 POLYMER 417 T_g 342	 POLYMER 406 T_g 328	 POLYMER 402 T_g 357
 POLYMER 397 T_g 365	 POLYMER 413 T_g 385	 POLYMER 415 T_g 358	 POLYMER 405 T_g 343	 POLYMER 578 T_g 327

Table 1 (continued)

$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CF}_2]_8 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CF}_2]_6 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CF}_2]_4 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CF}_2]_3 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CF}_2]_2 \\ \\ \text{CF}_3 \end{array}$	POLYMER 578 T _g 255
$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CF}_2 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{Cl---C---Cl} \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH}_3\text{---C---CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH---Cl} \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH---CH}_3 \\ \\ \text{CH}_3 \end{array}$	POLYMER 573 T _g 315
$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ [\text{CH}_2]_3 \\ \\ \text{Cyclohexyl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{Cl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{Cyclopentyl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{Pyridine-2-yl} \end{array}$	POLYMER 949 T _g 263
$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{Pyridine-4-yl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{Phenyl} \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CF---CF}_3 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{C=O} \\ \\ \text{CH---CH}_3 \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$	POLYMER 420 T _g 372
$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{CH---CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH---CH}_2\text{---CH}_3 \\ \\ [\text{CH}_2]_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ \text{CH}_2 \\ \\ \text{CH---CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ [\text{CH}_2]_9 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{---CH---CH}_2\text{---} \\ \\ \text{O} \\ \\ [\text{CH}_2]_7 \\ \\ \text{CH}_3 \end{array}$	POLYMER 384 T _g 270
POLYMER 389 T _g 207	POLYMER 216 T _g 253	POLYMER 730 T _g 211	POLYMER 385 T _g 194		

Table 1 (continued)

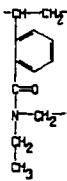
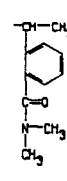
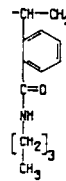
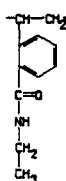
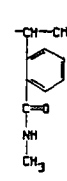
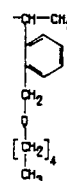
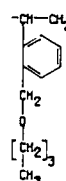
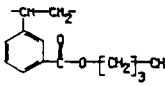
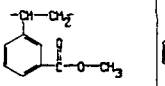
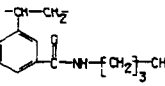
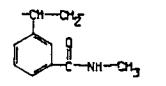
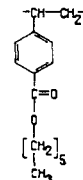
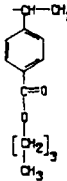
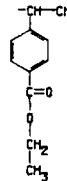
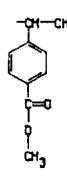
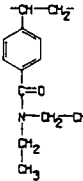
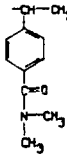
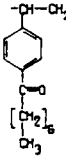
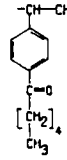
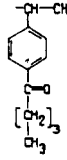
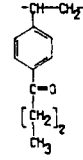
 POLYMER 741 T_g 381	 POLYMER 735 T_g 391	 POLYMER 1121 T_g 425	 POLYMER 650 T_g 463	 POLYMER 1133 T_g 381
 POLYMER 1132 T_g 420	 POLYMER 1131 T_g 438	 POLYMER 670 T_g 462	 POLYMER 793 T_g 320	 POLYMER 786 T_g 340
 POLYMER 1130 T_g 351	 POLYMER 1129 T_g 391	 POLYMER 1123 T_g 397	 POLYMER 1122 T_g 463	 POLYMER 695 T_g 339
 POLYMER 691 T_g 348	 POLYMER 688 T_g 365	 POLYMER 694 T_g 367	 POLYMER 176 T_g 386	 POLYMER 648 T_g 375
 POLYMER 651 T_g 358	 POLYMER 674 T_g 323	 POLYMER 665 T_g 338	 POLYMER 675 T_g 343	 POLYMER 642 T_g 347

Table 1 (continued)

POLYMER 685 Tg 375	POLYMER 680 Tg 339	POLYMER 518 Tg 305	POLYMER 190 Tg 250	POLYMER 188 Tg 235
POLYMER 186 Tg 231	POLYMER 185 Tg 253	POLYMER 1400 Tg 295	POLYMER 1399 Tg 350	POLYMER 174 Tg 305
POLYMER 172 Tg 278	POLYMER 171 Tg 237	POLYMER 170 Tg 221	POLYMER 76 Tg 208	POLYMER 75 Tg 220
POLYMER 74 Tg 228	POLYMER 73 Tg 246	POLYMER 72 Tg 279	POLYMER 180 Tg 300	POLYMER 481 Tg 368
POLYMER 1058 Tg 246	POLYMER 378 Tg 420	POLYMER 373 Tg 333	POLYMER 366 Tg 303	POLYMER 368 Tg 319

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Table 1 (continued)

POLYMER 371 T _g 326	POLYMER 375 T _g 320	POLYMER 367 T _g 237	POLYMER 369 T _g 311	POLYMER 378 T _g 324	POLYMER 364 T _g 286
POLYMER 365 T _g 310	POLYMER 38 T _g 340	POLYMER 39 T _g 365	POLYMER 581 T _g 283	POLYMER 27 T _g 253	POLYMER 34 T _g 267
POLYMER 29 T _g 259	POLYMER 15 T _g 233	POLYMER 33 T _g 228	POLYMER 18 T _g 235	POLYMER 2 T _g 251	POLYMER 21 T _g 270
POLYMER 372 T _g 317	POLYMER 101 T _g 205	POLYMER 100 T _g 205	POLYMER 99 T _g 224	POLYMER 98 T _g 218	POLYMER 97 T _g 256
POLYMER 96 T _g 234	POLYMER 95 T _g 236	POLYMER 107 T _g 238	POLYMER 91 T _g 243	POLYMER 94 T _g 247	POLYMER 106 T _g 251

Table 1 (continued)

POLYMER 370 T_g 319	POLYMER 812 T_g 250	POLYMER 92 T_g 263	POLYMER 83 T_g 295	POLYMER 14 T_g 223
POLYMER 13 T_g 223	POLYMER 28 T_g 235	POLYMER 25 T_g 241	POLYMER 105 T_g 251	POLYMER 102 T_g 228
POLYMER 104 T_g 235	POLYMER 103 T_g 233	POLYMER 973 T_g 250	POLYMER 10 T_g 223	POLYMER 22 T_g 223
POLYMER 1056 T_g 258	POLYMER 1055 T_g 263	POLYMER 8 T_g 215	POLYMER 4 T_g 223	POLYMER 6 T_g 249
POLYMER 16 T_g 202	POLYMER 31 T_g 213	POLYMER 377 T_g 217	POLYMER 26 T_g 228	POLYMER 11 T_g 218

Table 1 (continued)

 POLYMER 23 T _g 198	 POLYMER 5 T _g 215	 POLYMER 17 T _g 197	 POLYMER 32 T _g 208	 POLYMER 30 T _g 203
 POLYMER 7 T _g 214	 POLYMER 87 T _g 193	 POLYMER 1052 T _g 213	 POLYMER 89 T _g 215	 POLYMER 90 T _g 208
 POLYMER 86 T _g 213	 POLYMER 88 T _g 216	 POLYMER 972 T _g 238	 POLYMER 1 T _g 219	 POLYMER 41 T _g 270
 POLYMER 37 T _g 277	 POLYMER 35 T _g 236	 POLYMER 36 T _g 279	 POLYMER 12 T _g 249	 POLYMER 40 T _g 330
 POLYMER 9 T _g 292	 POLYMER 24 T _g 283	 POLYMER 702 T _g 401	 POLYMER 712 T _g 313	 POLYMER 713 T _g 325

Table 1 (concluded)

$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{NH} \\ \\ \text{CH—CH}_3 \\ \\ \text{[CH}_2\text{]}_5 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{NH} \\ \\ \text{CH—CH}_3 \\ \\ \text{[CH}_2\text{]}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{NH} \\ \\ \text{CH—CH}_3 \\ \\ \text{[CH}_2\text{]}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{NH} \\ \\ \text{CH—CH}_3 \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{NH} \\ \\ \text{CH—CH}_3 \\ \\ \text{CH}_3 \end{array}$
POLYMER 711 T _g 339	POLYMER 715 T _g 344	POLYMER 710 T _g 380	POLYMER 701 T _g 390	POLYMER 708 T _g 358
$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{N} \\ \\ \text{O} \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{C=O} \\ \\ \text{N} \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CF}_2\text{]}_2 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CF}_2 \\ \\ \text{CF}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CF}_3 \end{array}$
POLYMER 717 T _g 418	POLYMER 721 T _g 379	POLYMER 511 T _g 326	POLYMER 583 T _g 309	POLYMER 479 T _g 300
$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CH}_2 \\ \\ \text{CH—CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_{11} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_9 \\ \\ \text{I} \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_9 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_8 \\ \\ \text{CH}_3 \end{array}$
POLYMER 631 T _g 302	POLYMER 1046 T _g 241	POLYMER 951 T _g 262	POLYMER 350 T _g 237	POLYMER 1045 T _g 236
$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_7 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_5 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{[CH}_2\text{]}_2 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CH}_2 \\ \\ \text{CH}_3 \end{array}$
POLYMER 349 T _g 228	POLYMER 353 T _g 228	POLYMER 78 T _g 223	POLYMER 77 T _g 236	POLYMER 230 T _g 248
$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{N} \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CH} \\ \\ \text{CH}_2 \end{array}$	$\begin{array}{c} \text{—CH—CH}_2\text{—} \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{—CH—[CH}_2\text{]}_7 \\ \\ \text{CH}_3 \end{array}$	$\text{[CH}_2\text{]}_n$
POLYMER 213 T _g 375	POLYMER 613 T _g 268	POLYMER 229 T _g 260	POLYMER 872 T _g 210	POLYMER 228 T _g 153

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Table 2
CHEMICAL STRUCTURES OF SINGLE GROUPS

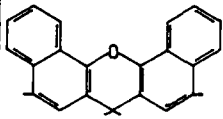
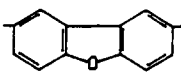
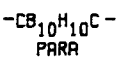
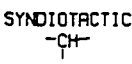
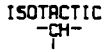
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18 	19 	20 SC 	21 SC 
22 	23 	24 SC 	25 SC 
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30 SC 	31 	32 SC 	33 
34 	35 	36 SC 	37 

Table 2 (continued)

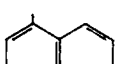
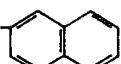
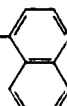
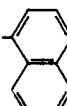
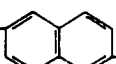
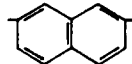
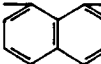
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46 SC  ISOTACTIC	47 	48 SC 	49 
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62 SC 	63 	64 	65 
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Table 2 (continued)

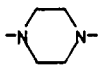
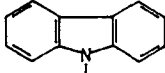
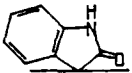
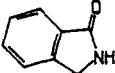
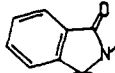
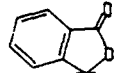
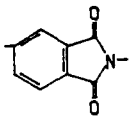
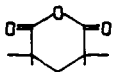
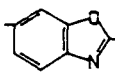
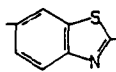
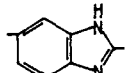
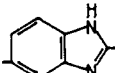
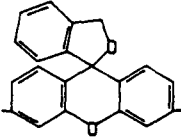
			
70 SC	72	73 SC	74 SC
			
75 SC	76	78	79 SC
			
80	81	82	83
			
84	86	87	88
			
89	90	92	93
			
94	95 SC	96 SC	98 SC
			
99	100	101	102
			
103 SC	104	105 SC	106

Table 2 (continued)

$\begin{array}{c} \\ \text{OH} \end{array}$ 107 SC	-O- 108	$\begin{array}{c} \\ \text{O} \end{array}$ 109 SC	-N=N- 110
$\begin{array}{c} \\ \text{NO}_2 \end{array}$ 111 SC	$\begin{array}{c} \\ \text{-P-} \\ \end{array}$ 112	$\begin{array}{c} \text{O} \\ \\ \text{-P-} \\ \end{array}$ 113	$\begin{array}{c} \text{O} \\ \\ \text{-P-} \\ \end{array}$ 114 SC
$\begin{array}{c} \text{S} \\ \\ \text{-P-} \\ \end{array}$ 115	-S- 116	$\begin{array}{c} \\ \text{S} \end{array}$ 117 SC	$\begin{array}{c} \text{O} \\ \\ \text{-S-} \end{array}$ 118
$\begin{array}{c} \\ \text{S=O} \end{array}$ 119 SC	$\begin{array}{c} \text{O} \\ \\ \text{-S-} \\ \\ \text{O} \end{array}$ 120	$\begin{array}{c} \\ \text{-Si-} \\ \end{array}$ 121	$\begin{array}{c} \\ \text{-Si-} \\ \end{array}$ 122 SC
$\begin{array}{c} \\ \text{-Sn-} \end{array}$ 123	$\begin{array}{c} \\ \text{Br} \end{array}$ 124 SC	$\begin{array}{c} \\ \text{Cl} \end{array}$ 125 SC	$\text{-C}_6\text{H}_5\text{C-}$ 126
$\begin{array}{c} \\ \text{I} \end{array}$ 127 SC	$\begin{array}{c} \\ \text{CH}_2\text{F} \end{array}$ 128 SC	$\begin{array}{c} \text{F} \\ \\ \text{-CH-} \end{array}$ 129	$\begin{array}{c} \\ \text{FCH} \end{array}$ 130 SC
$\begin{array}{c} \\ \text{CF}_3 \end{array}$ 131 SC	$\text{-CF}_2\text{-}$ 132	$\begin{array}{c} \\ \text{CF}_2 \end{array}$ 133 SC	$\text{-N=PF}_2\text{-}$ 134
$\begin{array}{c} \\ \text{-Sn-} \end{array}$ 135 SC	$\begin{array}{c} \\ \text{-CF-} \\ \end{array}$ 136	 137 SC	 138 SC

Table 2 (continued)

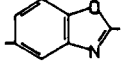
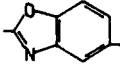
			
139 SC	140	141	142 SC
			
143	144	145	146
	--CH=CH-- CIS	--CH=CH-- TRANS	--C=CH-- TRANS
147	148	149	150
			
151	152	153 SC	154
			
156 SC	157 SC	159 SC	160 SC
			
161 SC	162	163	164 SC
			
165	166	167	169 SC
			
170	171 SC	172	173 SC

Table 2 (continued)

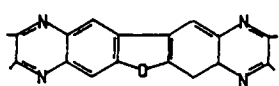
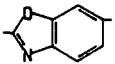
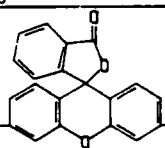
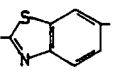
 174 SC	 175		 176
 177 SC	 178 SC	 179	 180 SC
 181	 182 SC	 183	 184
 185	 186	 187 SC	 188
 189	 190	 191	 192
 194	 196	 197	 198
 199	 200 SC	 201 SC	 202
 203	 204	 205	 206

Table 2 (continued)

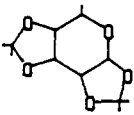
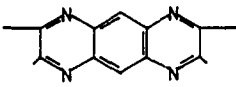
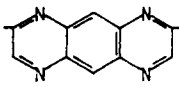
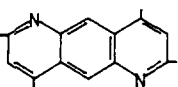
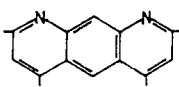
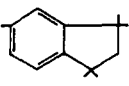
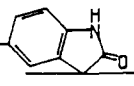
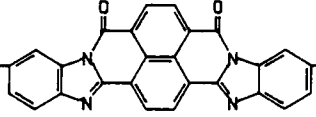
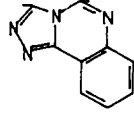
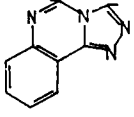
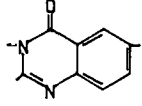
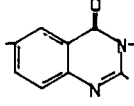
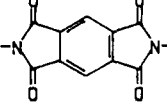
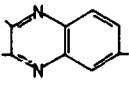
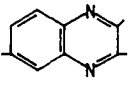
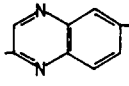
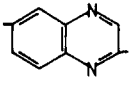
 207 SC	 208		 209
 210 SC	 211 SC	 212	 213 SC
 214 SC	 215	 216 SC	 217
 218 SC	 219	 220	 221
 222	 223	 224	 226
 228		 229	 230
 231	 232	 233	 234
 235	 236	 237	 238

Table 2 (continued)

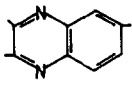
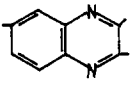
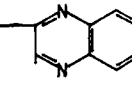
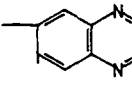
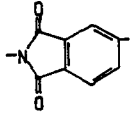
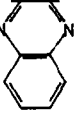
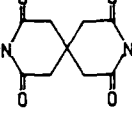
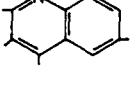
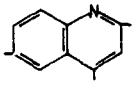
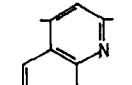
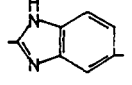
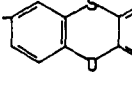
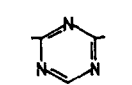
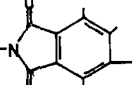
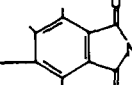
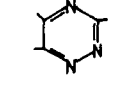
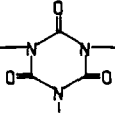
 239	 240	 241	 242
 243	 244	 245	 246
 247	 248	 249	 250
 251	 252	 253	 254
 255	 256	 257	 258
 259	 260	 261	 262
 263	 264	 265	 266
 267	 268	 269	 270

Table 2 (continued)

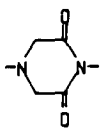
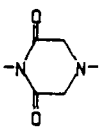
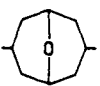
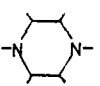
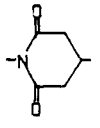
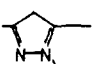
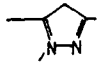
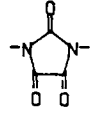
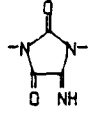
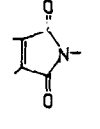
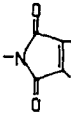
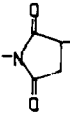
			
271	272	273	274
			
275	276	277	278
			
279	280	281	282
			
283	284	285	286
		$\text{[CH}_2\text{]}_2$	$\text{[CH}_2\text{]}_3$
287	288	302	303
$\text{[CH}_2\text{]}_4$	$\text{[CH}_2\text{]}_5$	$\text{[CH}_2\text{]}_6$	$\text{[CH}_2\text{]}_7$
304	305	306	307
$\text{[CH}_2\text{]}_8$	$\text{[CH}_2\text{]}_9$	$\text{[CH}_2\text{]}_{10}$	$\text{[CH}_2\text{]}_{11}$
308	309	310	311
$\text{[CH}_2\text{]}_{12}$	$\text{[CH}_2\text{]}_{13}$	$\text{[CH}_2\text{]}_{14}$	$\text{[CH}_2\text{]}_{15}$
312	313	314	315

Table 2 (continued)

$\overline{[CH_2]_{16}}$	$\overline{[CH_2]_{17}}$	$\overline{[CH_2]_{18}}$	$\overline{[CH_2]_{19}}$
316	317	318	319
$\overline{[CH_2]_{20}}$	$\overline{[CH_2]_n}$	$[CH_2]_2$	$[CH_2]_3$
320	321	352 SC	353 SC
$[CH_2]_4$	$[CH_2]_5$	$[CH_2]_6$	$[CH_2]_7$
354 SC	355 SC	356 SC	357 SC
$[CH_2]_8$	$[CH_2]_9$	$[CH_2]_{10}$	$[CH_2]_{11}$
358 SC	359 SC	360 SC	361 SC
$[CH_2]_{12}$	$[CH_2]_{13}$	$[CH_2]_{14}$	$[CH_2]_{15}$
362 SC	363 SC	364 SC	365 SC
$[CH_2]_{16}$	$[CH_2]_{17}$	$[CH_2]_{18}$	$[CH_2]_{19}$
366 SC	367 SC	368 SC	369 SC
$[CH_2]_{20}$	$[CH_2]_n$	$\overline{[CF_2]_2}$	$\overline{[CF_2]_3}$
370 SC	371 SC	402	403
$\overline{[CF_2]_4}$	$\overline{[CF_2]_5}$	$\overline{[CF_2]_6}$	$\overline{[CF_2]_7}$
404	405	406	407

Table 2 (concluded)

$\text{[CF}_2\text{]}_8$	$\text{[CF}_2\text{]}_9$	$\text{[CF}_2\text{]}_{10}$	$\text{[CF}_2\text{]}_{11}$	$\text{[CF}_2\text{]}_{12}$
408	409	410	411	412
$\text{[CF}_2\text{]}_{13}$	$\text{[CF}_2\text{]}_{14}$	$\text{[CF}_2\text{]}_{15}$	$\text{[CF}_2\text{]}_{16}$	$\text{[CF}_2\text{]}_{17}$
413	414	415	416	417
$\text{[CF}_2\text{]}_{18}$	$\text{[CF}_2\text{]}_{19}$	$\text{[CF}_2\text{]}_{20}$	$\text{[CF}_2\text{]}_n$	$\text{[CF}_2\text{]}_2$
418	419	420	421	452 SC
$\text{[CF}_2\text{]}_3$	$\text{[CF}_2\text{]}_4$	$\text{[CF}_2\text{]}_5$	$\text{[CF}_2\text{]}_6$	$\text{[CF}_2\text{]}_7$
453 SC	454 SC	455 SC	456 SC	457 SC
$\text{[CF}_2\text{]}_8$	$\text{[CF}_2\text{]}_9$	$\text{[CF}_2\text{]}_{10}$	$\text{[CF}_2\text{]}_{11}$	$\text{[CF}_2\text{]}_{12}$
458 SC	459 SC	460 SC	461 SC	462 SC
$\text{[CF}_2\text{]}_{13}$	$\text{[CF}_2\text{]}_{14}$	$\text{[CF}_2\text{]}_{15}$	$\text{[CF}_2\text{]}_{16}$	$\text{[CF}_2\text{]}_{17}$
463 SC	464 SC	465 SC	466 SC	467 SC
$\text{[CF}_2\text{]}_{18}$	$\text{[CF}_2\text{]}_{19}$	$\text{[CF}_2\text{]}_{20}$	$\text{[CF}_2\text{]}_n$	
468 SC	469 SC	470 SC	471 SC	

Table 4

LISTING OF GROUP AND CONSTITUENT SINGLE-GROUP NUMBERS

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
3	51	51072.	4	19	1001006006.
5	109	32050.	6	109	32054.
10	132	6132.	11	102	6031.
12	6	6102.	13	6	6006.
14	6	6031.	15	31	6102.
24	51	108121.	25	121	1001049108.
26	132	108132.	28	133	104133.
29	133	111133.	33	104	108131132.
36	132	108136.	39	136	108131132.
43	6	49108.	44	49	6006.
45	133	104131.	46	6	51108.
48	109	131136.	49	109	12131.
50	19	109109132132.	51	132	19019.
55	136	109132132.	58	14	6006032.
57	32	14109.	59	109	7032.
59	7	7109.	60	7	7007.
61	109	1007.	63	109	7007.
64	7	1109.	66	14	6006052.
68	52	7014.	71	7	7052.
72	7	1007.	74	14	6006007.
80	133	100133.	84	136	6006131.
85	14	6006142.	87	31	51108.
88	109	7136.	89	19	1001051051.
90	108	31031.	92	51	31108.
93	51	6031.	94	51	31116.
95	49	31108.	96	6	51051.
97	108	6051.	98	6	6108.
99	108	6006.	100	108	51051.
101	116	6051.	102	6	5116.
103	108	6031.	104	31	5110.
105	7	1015.	107	14	6006132.
108	133	14133.	109	108	31051.
110	101	108108.	113	52	14133.
114	133	52133.	115	51	14108.
117	31	108140.	120	148	6006.
121	149	6006.	122	6	6148.
123	6	6149.	124	140	31031.
125	163	31031.	126	31	108163.
127	49	121132.	128	14	1051051.
129	51	38108.	130	38	51051.
131	51	121132.	132	136	109129129.
134	129	136136.	135	132	14014.
136	14	109132132.	137	136	125132132.
138	132	136136.	139	150	6006125.
140	109	133136.	141	108	6145.
142	51	31031.	144	145	108108.
148	19	1006006032.	145	7	7036.
157	49	132132.	152	108	6132.
162	151	109109151151.	159	109	7151.
164	109	14131.	163	132	132132.
166	133	133133.	165	136	125136136.
171	19	51051133133.	169	136	6006138.
173	133	19125.	172	14	31031.
175	32	52109.	174	6	7031031.
177	31	14108.	176	14	6108.
179	7	109131.	178	31	109133.
181	7	109133.	180	32	7133.
184	14	1006116.	183	133	32131.
187	32	109153.	185	109	14156.
190	109	32156.	189	136	109131131.
193	132	109136.	191	133	14131.
195	136	132132142.	194	6	102132.
203	132	6108.	197	154	6154.
206	7	52109.	205	108	108154.
220	121	1001108108.	207	154	45045108108.
224	16	1001007.	226	121	15109.
229	19	1001006108.	230	7	15109.
231	19		232	109	15032.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
235	7	7014.	236	15	7007007.
237	15	1007109.	239	15	1001109.
242	31	49108.	243	49	31031.
253	133	109200.	255	133	7200.
256	109	131133.	259	109	133133.
263	121	1007108108.	265	7	7045.
266	121	1045108108.	272	48	14032.
274	161	14109124.	290	15	1007007.
281	6	14031.	295	116	6006.
296	32	48105.	297	121	1001008108.
298	32	52105.	299	32	48105.
300	35	1052.	303	32	7052.
304	35	1006006.	307	150	1006006.
311	109	1161.	316	103	1032.
319	109	32036.	328	109	1032.
330	19	6006032125.	332	15	7007109.
334	7	15015.	338	7	32125.
340	20	1001001109.	349	109	7161.
355	139	14125.	367	109	1052.
372	14	1006148.	373	14	6006048.
375	6	14148.	377	148	6014.
382	19	1006006007.	383	109	45052.
385	14	6014125.	393	103	7032.
394	32	14103.	395	15	1007105.
396	103	15032.	399	103	20032.
400	105	7007032.	403	14	6006025.
405	15	1001103.	408	32	14178.
410	32	14177.	419	15	1001014.
420	7	48109.	421	7	7131.
422	109	7055.	424	116	4031.
426	6	108108.	430	31	108190.
431	14	1006006.	433	108	132136.
435	14	1006108.	436	14	6108160.
437	31	6072.	438	72	31031.
439	109	137151.	441	151	109125151151.
442	50	109131.	443	109	50151.
445	31	102108.	452	108	132132.
454	108	49049.	455	14	1108108.
457	32	1109.	459	14	6006109.
460	121	1001108186.	461	186	121121.
462	121	1108108142.	467	121	1006007108.
468	6	6121.	469	6	6132.
470	133	7159.	471	109	7014.
477	133	100131.	481	109	7190.
483	55	31031109.	490	190	31031109.
492	19	6006125125.	493	6	132132.
494	132	6006.	497	109	1014.
503	14	6006107.	507	133	1104.
508	121	1001102102.	509	133	124132.
519	102	6006.	521	121	7007108108.
523	6	49102.	525	132	100108.
526	132	100116.	528	100	131132136.
529	136	100108131.	531	17	6006025.
535	6	17017.	538	116	6116.
539	51	6006.	540	6	6051.
541	108	6049.	542	7	1052.
543	6	116116.	544	31	31108.
545	116	116116.	546	116	6014.
547	14	6007116.	548	7	14109.
549	7	25109.	551	6	14118.
554	7	1014.	555	6	19116.
556	31	6116.	557	7	7015.
559	6	51116.	561	102	31053.
563	53	1102102.	572	14	6007108.
573	7	14124.	574	53	102102109.
575	7	14125.	576	7	14020.
578	116	37037.	579	37	116116.
581	20	7125125125.	584	109	7156.
586	109	7055.	588	121	1001006006.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
589	6	121121.	590	31	24108.
591	26	31031.	592	132	100132.
593	6	31116.	594	100	132132133.
595	100	131132133.	596	31	108132.
597	132	31132.	598	31	34108.
601	34	31031.	602	102	121121.
603	121	1006006052.	603	102	105121.
606	105	1001052.	607	121	6006045052.
608	121	1045104104.	609	121	125133.
610	104	121121122.	612	133	1001001104.
614	109	14032.	613	133	19109.
616	7	19032.	619	20	1001001007.
621	50	109125.	623	109	32045.
624	15	1109131.	625	109	52151.
627	6	14019.	628	52	10109.
629	109	45151.	630	6	6014.
631	48	7014.	632	52	7109.
634	52	109125.	636	109	1151.
637	151	125125151151.	638	7	7032.
639	32	7109.	640	7	45109.
641	116	51051.	642	51	116116.
643	116	132132.	644	151	105105151151.
645	6	14108.	646	19	1001006051.
647	105	1001151.	649	14	1006051.
651	51	6108.	653	7	32044.
654	19	1045051051.	655	33	6006.
656	6	6033.	657	9	1001039051.
658	78	1006006.	660	51	39108.
663	40	7051051.	664	7	1040.
665	51	40108.	666	51	108130.
667	120	51051.	668	51	41108.
673	6	33108.	671	15	1001041.
675	51	108108.	674	6	78108.
678	123	121121.	676	121	1001108126.
681	223	1001001051108.	679	7	7183.
683	109	7183.	682	108	6222.
686	7	1032.	684	32	45109.
689	48	32125.	688	32	109183.
691	184	32032149149.	690	149	184184.
693	32	109184.	692	6	6078.
696	7	1105.	698	105	7007007.
699	20	1001001103.	699	109	7052.
704	104	6007031.	700	7	1104.
707	31	6104.	706	104	1006031.
709	108	6014.	708	14	6045108.
711	7	45104.	710	121	1001051108.
715	100	133136136.	712	14	45051051.
718	14	6006131.	716	109	1015.
723	109	7133.	721	51	82108.
725	92	1051051.	724	100	131136136.
733	100	132133136.	726	109	32183.
730	83	51051.	731	7	109183.
732	32	1136.	733	31	55108.
734	121	1108108187.	737	81	51051.
738	51	81108.	741	7	7117.
742	117	7007.	743	7	7024.
745	7	24117.	746	187	121125.
748	7	7127.	750	109	7015.
751	132	116116.	752	117	1007.
754	7	1117.	756	14	6006098.
759	121	1006006045.	761	129	129129.
768	133	151133.	770	134	134134.
772	133	7131.	773	133	109133.
776	133	109131.	777	133	7130.
778	130	151133.	780	135	7007007109.
781	109	32052.	782	52	24109.
784	14	1031031.	785	52	52109.
788	19	6006032128.	790	133	133200.
791	167	132132.	792	136	131132132.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
793	50	1109.	794	46	31132.
795	132	49132.	796	151	103105151151.
797	6	108132.	799	49	31049.
800	49	108132.	801	108	31049.
802	109	32135.	807	19	6006007032.
809	6	19019.	810	7	7019.
814	7	7135.	816	108	6162.
817	136	6006032.	818	103	7151.
819	7	1103.	820	201	1014.
821	105	7007151.	822	151	103103151151.
824	151	124124151151.	826	7	109109.
827	19	51051131131.	828	15	7024125.
829	7	24052.	830	6	6019.
833	6	14014.	838	52	20032.
839	19	1007051051.	840	51	19108.
841	7	1019.	842	14	15051051.
843	14	7051051.	844	32	19103.
846	6	19108.	847	19	6006007007.
848	7	19125.	849	6	6150.
851	32	20109.	856	14	6006161.
860	14	6006164.	864	7	7105.
870	7	24109.	871	6	6186.
874	108	121121.	877	108	6019.
884	7	7121.	888	121	1007108126.
890	186	6006.	891	6	6035.
903	109	20032.	904	14	6006050.
905	55	108108122.	909	20	1001001052.
910	32	95109.	915	12	1001055109.
924	7	1121.	925	109	122122.
929	122	1001109109.	930	108	14014.
933	7	15020.	931	12	1001045109.
935	39	1019051.	933	41	1015051051.
955	165	19108125.	959	51	108222.
965	51	121121.	969	121	1007101108.
970	224	19108125125.	973	14	6020108.
975	108	6113.	979	109	7113.
980	52	14032.	981	104	108132133.
982	108	104132.	985	7	7103.
986	32	96109.	988	113	108108109.
989	113	108108133.	990	133	113133.
991	113	45108108.	992	113	1108108.
993	7	1055.	994	113	105108108.
995	109	14030.	996	51	31132.
997	132	51132.	1000	108	14031.
1001	32	48109.	1004	31	72108.
1006	132	84132.	1008	108	31055.
1009	7	7055.	1010	55	7108108.
1012	13	55133.	1015	6	19121.
1016	31	55102.	1017	58	1031031.
1019	31	49102.	1021	20	1001001032.
1022	15	1001052.	1023	52	32045.
1024	32	50109.	1025	50	32111.
1027	32	32111.	1029	48	32109.
1030	109	32048.	1031	50	32109.
1032	109	1050.	1033	109	1048.
1034	52	7032.	1035	52	1032.
1036	50	1032.	1037	48	1032.
1038	52	32125.	1039	50	32125.
1040	52	32124.	1041	50	32124.
1043	15	1001032.	1044	20	32125125125.
1045	15	32125125.	1046	105	1001113.
1047	14	6006117.	1048	117	1014.
1049	109	14015.	1050	132	132167.
1051	7	7119.	1052	116	7007.
1053	7	1119.	1054	7	7124.
1056	109	32060.	1057	60	109125125125125.
1059	52	109109.	1060	48	109125.
1061	52	7024.	1062	54	109125125.
1063	132	132170.	1064	50	105109.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
1065	105	1001050.	1068	7	20109.
1069	20	7007007007.	1070	105	1001007.
1071	49	108108.	1072	55	31031133.
1073	109	1019.	1074	19	1006006109.
1075	15	1007107.	1076	132	104132.
1082	102	31049.	1084	84	31051.
1085	31	84084.	1086	84	31049.
1093	108	51099.	1094	99	108108.
1096	224	1001019108.	1098	108	51055.
1099	55	108108111.	1101	31	51051.
1102	51	93108.	1103	93	51051.
1106	6	4104.	1107	51	108118.
1108	118	51051.	1109	51	108110.
1110	110	51051.	1111	132	108170.
1112	19	108116.	1113	51	51108.
1114	51	45045051051.	1115	14	1037051.
1118	47	14051.	1117	51	37108.
1119	51	68108.	1119	68	51051.
1120	51	92092.	1121	49	92092.
1122	92	45049051.	1124	104	136136.
1133	32	1104.	1136	32	6006032.
1135	32	7104.	1138	7	15032.
1137	32	45104.	1141	32	104133.
1139	32	62104.	1143	121	1001101108.
1142	133	32133.	1148	14	6006201.
1144	101	121121.	1150	14	6006137.
1149	14	6006137.	1152	121	1045049108.
1151	49	121121.	1154	55	1108108.
1153	102	31186.	1157	105	1001032.
1156	108	84084.	1162	184	32032148148.
1161	186	102102.	1164	183	7026026.
1163	148	184184.	1166	183	26026109.
1165	26	183183.	1168	184	26026032032.
1169	183	26026032.	1170	103	14109124.
1171	26	184184.	1172	164	7164.
1173	50	14032.	1174	109	45045051051.
1175	109	1164.	1180	175	6170.
1181	32	50103.	1184	6	31167.
1185	51	10175.	1187	102	108179.
1189	170	6102.	1194	51	6179.
1190	170	49102.	1197	6	49051.
1196	51	116179.	1201	93	83093.
1200	49	93093.	1203	51	6034.
1202	51	93093.	1205	181	6188.
1204	6	108181.	1208	34	6188.
1207	6	34034.	1213	6	6189.
1211	181	6006.	1218	181	108196.
1215	181	6053.	1223	51	104197.
1220	6	188189.	1227	31	31102.
1226	197	31031.	1239	102	6102.
1228	31	102197.	1231	34	6006.
1230	102	31034.	1233	102	31051.
1232	6	34102.	1235	51	102108.
1234	49	102102.	1237	102	31198.
1236	51	102102.	1239	102	1001104.
1238	198	102102.	1241	15	104104.
1240	104	6015031.	1243	51	31199.
1242	104	1031051.	1245	108	31202.
1244	31	108197.	1250	72	6204.
1249	31	72197.	1254	6	197203.
1251	202	24024072072.	1257	31	197205.
1255	204	6031.	1259	31	204206.
1258	205	1001031031.	1261	108	45045045108108.
1260	206	480480481088108.	1263	206	47228.
1262	48	131206.	1265	108	64228.
1264	228	108108.	1267	108	49228.
1266	47	47108.	1269	108	45045049049.
1268	64	108108.	1271	208	
1270	108	51228.			

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
1272	47	208208.	1273	208	45045051051.
1274	51	208208.	1275	209	51051.
1276	51	209209.	1277	51	108209.
1278	230	45045051051.	1279	51	51220.
1280	230	45045051051.	1281	51	51221.
1282	51	108220.	1283	51	108221.
1287	230	49231.	1290	233	1006049.
1292	51	102232.	1293	233	1006051.
1295	51	6232.	1297	51	108232.
1298	6	6234.	1299	234	6006.
1301	108	6147.	1302	302	6006.
1303	303	6006.	1304	304	6006.
1305	305	6006.	1306	306	6006.
1307	307	6006.	1308	308	6006.
1309	309	6006.	1312	312	6006.
1314	314	6006.	1321	321	6006.
1322	322	7007.	1353	353	7007.
1354	354	7007.	1355	355	7007.
1356	356	7007.	1357	357	7007.
1358	358	7007.	1359	359	7007.
1360	360	7007.	1361	361	7007.
1363	363	7007.	1364	364	7007.
1365	365	7007.	1366	366	7007.
1400	108	4199.	1402	402	132132.
1403	403	132132.	1404	404	132132.
1405	405	132132.	1406	406	132132.
1408	408	132132.	1421	421	132132.
1452	452	133133.	1453	453	133133.
1454	454	133133.	1455	455	133133.
1456	456	133133.	1457	457	133133.
1500	234	51051.	1501	51	14234.
1502	234	49049.	1503	49	31234.
1504	51	49049.	1505	234	49051.
1506	51	49051.	1507	51	31234.
1508	51	38234.	1513	51	108234.
1523	51	116234.	1527	51	51237.
1535	51	108237.	1531	51	51051.
1538	51	108239.	1536	51	12423.
1540	2	31049052.	1542	51	109239.
1543	104	52052.	1544	51	109240.
1547	51	45239.	1549	51	7239.
1551	51	24239.	1553	51	107239.
1558	51	109241.	1559	51	45241.
1565	51	51239.	1573	51	102239.
1574	51	1239.	1578	240	31045051.
1580	240	31045049.	1581	55	31031032.
1582	32	55109.	1583	239	45051108.
1586	239	45051120.	1591	238	31051.
1592	244	102102.	1593	102	31244.
1594	237	51108.	1597	237	51120.
1600	247	6006.	1601	6	6247.
1602	247	31051.	1603	51	108247.
1604	248	45045051108.	1608	51	51248.
1611	51	108248.	1612	230	45250250.
1613	250	45051108.	1617	51	51250.
1620	51	108250.	1621	252	45051051.
1623	51	108253.	1626	51	51252.
1628	254	51051.	1629	51	108254.
1630	51	108255.	1633	51	51254.
1634	254	49051.	1639	90	6049.
1642	90	6051.	1644	51	108256.
1645	256	49108.	1648	256	51108.
1650	256	49120.	1660	102	6100.
1661	100	102102105.	1663	105	7007100.
1669	102	51100.	1670	51	102257.
1671	105	45045100.	1673	6	6257.
1676	102	31064.	1677	64	102243.
1679	51	51102.	1679	51	51243.
1681	84	31055.	1683	32	45055.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
1690	102	49100.	1691	49	102243.
1692	105	1001100.	1693	100	45102102.
1694	102	49259.	1695	259	102102.
1697	51	6243.	1698	51	108243.
1700	100	45051051.	1701	51	100243.
1702	51	84102.	1703	51	120243.
1708	243	6031.	1710	41	84108.
1714	6	6243.	1717	243	51121.
1721	121	1001051084.	1723	121	45045051051.
1724	51	121243.	1725	243	49132.
1726	108	49132.	1727	49	108243.
1730	84	19049.	1733	84	19064.
1736	84	19051.	1738	108	49051.
1740	51	11243.	1753	243	49108.
1740	51	102243.	1761	51	6102.
1762	51	102120.	1763	49	102120.
1764	120	49049.	1765	49	120243.
1766	260	45045045049051.	1770	51	108260.
1772	260	45045045051051.	1774	51	108261.
1775	51	108260.	1777	51	6260.
1780	47	47256.	1781	243	7262262.
1783	7	7262.	1790	51	19031.
1800	100	49102174.	1801	49	100102.
1803	100	51102174.	1804	51	100102.
1809	51	108263.	1811	51	116265.
1812	100	108108125.	1813	108	51100.
1817	52	108265.	1819	52	45265.
1824	51	108265.	1825	52	124265.
1827	52	7265.	1829	52	24265.
1831	52	107265.	1844	51	116265.
1843	100	45108108.	1846	265	45049132.
1849	132	132266.	1851	265	45051132.
1853	108	100199.	1857	259	104104.
1858	104	45100259.	1859	100	45104104.
1860	265	45049231.	1863	265	45051231.
1866	51	6265.	1867	243	51231.
1871	268	51231.	1872	51	108268.
1873	269	6006045.	1874	6	31269.
1876	6	6276.	1878	120	40004.
1879	4	120120.	1900	6	34108.
1904	9	31031.	1905	31	9108.
1906	55	31031111.	1909	116	14031.
1910	14	1031116.	1911	31	14116.
1912	6	6269.	1913	269	6006007.
1914	7	7269.	1915	269	1006006.
1916	270	1001031031.	1917	31	6270.
1918	51	270271.	1919	271	1001031031.
1920	51	102270.	1921	102	31147.
1923	51	270272.	1926	272	1031031.
1927	51	270273.	1928	273	1031031.
1929	51	270274.	1930	274	1031031.
1933	51	108270.	1936	270	1001031102.
1937	102	49270.	1938	270	1001102102.
1939	102	31270.	1940	31	51270.
1941	6	49275.	1942	275	6006.
1944	6	31047.	1945	31	47072.
1946	47	108108.	1947	108	31277.
1948	277	5051.	1949	31	49072.
1950	102	102102.	1952	72	102102.
1954	31	1001001001031031.	1955	102	31072.
1956	278	31031.	1957	31	102278.
1958	279	102116.	1959	102	102279.
1962	279	6281.	1963	102	31279.
1965	6	6006174.	1966	281	6006.
1967	9	92102.	1968	6	92306.
1969	49	45049049.	1970	92	45049049.
1973	282	45049051.	1976	282	45051051.
1977	283	6284.	1978	282	45049051.
1979	51		1980	284	51051.

Table 4 (continued)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
1981	51	108284.	1982	6	284304.
1983	284	6051.	1984	51	51284.
1985	51	108285.	1986	285	51051.
1987	51	6285.	1988	6	285304.
1989	285	6051.	1990	51	51285.
1991	285	6006.	1992	288	6006.
1993	6	6288.	1994	6	288288.
1995	108	512286.	1998	51	6287.
1999	287	51108125.	2003	108	147286.
2005	147	108108125.	2008	287	49108125.
2010	51	108287.	2011	108	49286.
2013	121	1001101101.	2014	121	1001016108.
2015	16	121121.	2016	108	49277.
2017	3	1001120120.	2018	120	3108.
2019	108	51120.	2021	120	3102.
2022	102	6120.	2024	108	84132.
2030	7	1262.	2031	7	14015.
2032	7	20125.	2040	243	51132.
2041	49	132243.	2042	20	1001001014.
2043	108	51147.	2044	108	51199.
2046	6	19120.	2047	120	6006.
2048	5	102102.	2049	120	4051.
2050	52	15032.	2051	32	15109.
2052	102	5072.	2054	6	108136.
2055	136	6108131.	2058	51	234239.
2060	179	51179.	2061	237	51237.
2062	51	237237.	2063	31	240240.
2065	239	49052239.	2066	49	239239.
2067	239	45051239.	2068	51	239239.
2073	257	6257.	2074	19	84084131131.
2075	51	51084.	2077	51	240240.
2078	49	240240.	2079	245	49052245.
2080	49	245245.	2081	51	245245.
2084	49	282282.	2085	51	282282.
2086	49	283283.	2087	51	283283.
2089	19	1001224224.	2093	6	196306.
2098	51	102256.	2111	6	256303.
2113	49	108287.	2115	199	1015108108.
2116	15	1007199.	2117	199	1001108108.
2123	84	31064.	2126	265	45051265.
2127	265	51052265.	2128	265	1051265.
2130	263	51263.	2131	51	263263.
2132	19	1001165165.	2133	147	1102147.
2137	49	287287.	2139	179	6179.
2143	196	51196.	2144	196	6196.
2145	19	131131224224.	2146	231	229229.
2148	241	21049052241.	2149	49	241241.
2150	239	31052239.	2152	31	238238.
2154	6	238238.	2157	51	248248.
2158	51	250250.	2160	51	250250.
2161	49	254254.	2163	49	256256.
2164	6	90090.	2165	256	47256.
2166	239	45049239.	2167	265	45049265.
2168	256	49256.	2169	49	170170.
2171	267	45051265.	2172	265	45051267.
2173	51	265267.	2174	231	264268.
2175	257	49120.	2176	120	89090.
2178	49	256257.	2179	53	1188188.
2180	6	14188.	2182	108	240240.
2183	120	240240.	2184	51	239243.
2185	108	238238.	2186	120	238238.
2187	49	31232.	2188	108	249249.
2190	108	251251.	2191	108	90090.
2192	51	243243.	2193	121	1001084084.
2194	64	243243.	2196	55	32243243.
2197	49	243243.	2198	51	243243.
2199	231	266266.	2200	231	264264.
2201	116	280280.	2202	108	199286.
2203	108	165286.	2205	108	199224.

Table 4 (concluded)

Group No.	Main single group	Neighbouring groups	Group No.	Main single group	Neighbouring groups
2206	189	1001001006188.	2207	49	230230.
2208	256	51257.	2209	257	51256.
2210	256	6257.	2211	257	6256.
2212	109	54151.			

Table 5

POLYMER STRUCTURES IN NUMERICAL TERMS

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 1	8	219	56	1	57	1	58	1	59	1	60	1	72	2		
* 2	8	833	56	1	57	1	105	2	232	1	237	2	833	1		
* 4	10	223	56	1	57	1	58	1	59	1	741	2	742	1		
		743	833	1												
* 5	11	215	56	1	57	1	58	1	59	1	60	1	741	2		
		742	743	2	833	1										
* 6	9	249	56	1	57	1	58	1	59	1	741	1	742	1		
		745	833	1												
* 7	13	214	56	1	57	1	58	1	59	1	741	1	742	1		
		745	833	1	1354	4										
* 8	11	215	56	1	57	1	58	1	59	1	60	1	741	2		
		742	743	2	833	1										
* 9	5	292	56	1	57	1	319	2	833	1						
* 10	9	223	56	1	57	1	58	1	59	2	63	1	64	2		
		833														
* 11	10	218	56	1	57	1	58	1	59	2	60	1	63	1		
		64	833	1												
* 12	6	249	56	1	57	1	58	1	64	2	833	1				
* 13	10	223	56	1	57	1	58	1	105	4	230	1	236	1		
		833														
* 14	12	223	56	1	57	1	58	1	60	1	72	2	105	2		
		230	236	1	557	1	833	1								
* 15	15	233	56	1	57	1	60	1	72	2	105	2	232	1		
		236	237	2	557	3	833	1								
* 16	9	202	56	1	57	1	58	1	59	1	741	1	742	1		
		754	833	1												
* 17	10	197	56	1	57	1	58	1	59	1	60	1	741	1		
		742	754	2	833	1										
* 18	11	235	56	1	57	1	72	2	232	1	237	2	557	1		
		833	1352	2												
* 21	7	270	56	1	57	1	232	1	239	3	833	1				
* 22	8	223	56	1	57	1	58	1	59	2	61	2	833	1		
* 23	9	198	56	1	57	1	58	1	59	2	60	1	61	2		
		833														
* 24	5	283	56	1	57	1	328	2	833	1						
* 25	9	241	56	1	57	1	58	1	105	2	230	1	290	2		
		833														
* 26	9	228	56	1	57	1	58	1	59	1	229	3	557	1		
		833														
* 27	18	253	56	1	57	1	60	1	72	2	105	2	229	3		
		232	236	1	332	1	334	1	557	3	833	1				
* 28	10	235	56	1	57	1	58	1	72	2	230	1	290	2		
		557	833	1												
* 29	10	258	56	1	57	1	229	3	232	1	237	2	334	1		
		833														
* 30	10	203	56	1	57	1	58	1	59	1	741	1	752	2		
		833	1352	2												
* 31	8	213	56	1	57	1	58	1	59	1	741	1	752	2		
		833														
* 32	9	208	56	1	57	1	58	1	59	1	60	1	741	1		
		752	833	1												
* 33	12	228	56	1	57	1	72	2	232	1	237	2	557	1		
		833	1353	3												
* 34	9	267	56	1	57	1	105	4	232	1	332	1	833	1		
* 35	7	236	56	1	57	1	58	1	59	1	72	2	833	1		
* 36	6	279	56	1	57	1	58	1	640	2	833	1				
* 37	7	277	56	1	57	1	58	1	59	1	743	2	833	1		
* 38	8	340	56	1	57	1	175	1	328	2	781	1	785	1		
		833														
* 39	6	365	56	1	57	1	781	1	782	2	833	1				
* 40	9	330	56	1	57	1	623	2	833	1						
* 41	7	270	56	1	57	1	58	1	59	1	265	2	833	1		
* 42	9	293	58	1	59	1	60	1	72	2	148	2	615	1		
		809														
* 43	9	331	105	2	148	2	232	1	237	2	615	1	809	1		
* 44	9	381	148	2	340	4	615	1	809	1	903	1				
* 45	6	380	148	2	319	2	615	1	809	1						

Table 5 (continued)

PNo.	Ngroups	Tg	Group	Numbers followed by their coefficients, in pairs
*	46	13	263	58 1 60 1 72 2 105 2 148 2 230 1
**	47	7	236	58 1 615 2 148 2 215 1 809 1 815 1
**	49	9	338	58 1 615 2 148 2 215 1 809 1 815 1
**	50	8	327	58 1 615 2 148 2 215 1 809 1 815 1
**	52	6	354	148 2 232 1 615 1 809 1 815 1
**	53	6	378	148 2 232 1 615 1 809 1 815 1
**	54	6	383	148 2 232 1 615 1 809 1 815 1
**	54	8	308	58 1 59 1 72 2 148 2 615 1 809 1
**	55	7	327	58 1 148 2 615 1 809 1 815 1
**	56	9	379	148 2 175 1 328 2 615 1 781 1 785 1
*	57	8	809	58 1 59 1 148 2 615 1 743 2 809 1
**	58	7	364	148 2 615 1 781 2 782 2 809 1 815 1
**	59	8	428	58 1 59 1 148 2 265 2 615 1 809 1
**	60	9	499	58 1 59 1 60 1 72 2 330 2 615 1
*	63	7	809	58 1 64 2 330 2 615 1 809 1
**	66	6	351	58 1 64 2 330 2 615 1 809 1
**	66	6	398	328 2 330 2 615 1 809 1
**	67	8	329	58 1 59 1 72 2 330 2 615 1 809 1
**	68	13	235	72 2 98 4 99 1 103 2 176 1 177 2
*	69	15	235	72 2 98 4 99 1 103 2 176 1 177 2
*	70	17	215	72 2 98 4 99 1 103 2 176 1 177 2
*	71	19	235	1354 2 4 98 4 99 1 103 2 176 1 177 2
*	72	7	235	1356 2 6 66 1 68 1 71 1 72 2 833 1
**	73	9	246	66 1 68 1 71 1 72 2 833 1
**	74	11	228	66 1 68 1 71 1 72 2 833 1
**	75	12	220	66 1 68 1 71 1 72 2 833 1
**	76	13	208	66 1 68 1 71 1 72 2 833 1
**	77	5	236	72 2 74 1 235 1 833 1
**	78	6	223	60 1 72 2 74 1 235 1 833 1
**	79	5	230	64 2 459 1 471 1 833 1
**	80	7	218	59 1 60 1 72 2 459 1 471 1
**	81	8	207	59 1 72 2 459 1 471 1
**	82	9	196	59 1 72 2 459 1 471 1
**	83	9	295	56 1 57 1 58 1 619 4 833 1
**	86	11	213	56 1 57 1 58 1 59 1 72 2 833 1
*	87	20	1354	56 1 57 1 58 1 59 1 72 2 833 1
*	89	10	1363	56 1 57 1 58 1 59 1 72 2 833 1
*	89	13	216	56 1 57 1 58 1 59 1 72 2 833 1
*	90	12	1353	56 1 57 1 58 1 59 1 72 2 833 1
*	91	8	208	56 1 57 1 58 1 59 1 72 2 833 1
*	91	8	243	56 1 57 1 58 1 181 1 183 1 768 2
**	92	6	833	56 1 57 1 58 1 179 2 833 1
**	94	7	263	56 1 57 1 58 1 181 1 772 2 833 1
**	95	9	247	56 1 57 1 58 1 166 1 181 1 183 1
*	96	10	768	833 1 57 1 58 1 181 1 183 1 768 2
*	97	12	833	1452 1 56 1 57 1 58 1 181 1 183 1 768 2
*	98	9	256	833 1 1454 1 56 1 57 1 58 1 181 1 183 1 256 2
*	99	10	773	833 1 56 1 57 1 58 1 181 1 183 1 259 1
*	100	11	224	56 1 57 1 58 1 181 1 183 1 259 1
*	101	12	205	56 1 57 1 58 1 181 1 183 1 259 1
*	101	12	768	56 1 57 1 58 1 166 1 181 1 183 1
*	102	11	259	56 1 57 1 58 1 59 2 63 1 181 1
*	102	11	228	56 1 57 1 58 1 59 2 63 1 181 1
*	102	11	183	56 1 57 1 58 1 59 2 63 1 181 1

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 103	12	233	56	1	57	1	58	1	59	4	63	1	253	2		
* 104	9	718	56	1	57	1	58	1	59	2	63	1	179	2		
* 105	9	833	56	1	57	1	58	1	59	2	253	2	718	1		
* 106	8	833	56	1	57	1	58	1	181	1	777	1	778	2		
* 107	9	833	56	1	57	1	58	1	166	1	181	1	183	1		
* 108	8	790	56	1	57	1	58	1	166	1	181	1	183	1		
* 111	12	233	148	2	232	1	615	1	624	3	809	1	694	1		
* 115	10	809	58	1	59	1	148	2	615	1	693	4	694	1		
* 116	11	1352	58	1	59	1	72	2	148	2	615	1	809	1		
* 119	17	1352	58	1	59	1	72	2	148	2	615	1	809	1		
* 128	8	401	148	2	615	1	632	1	781	1	809	1	829	2		
* 149	4	385	335	1	833	1	1149	1								
* 160	5	300	66	1	68	1	542	2	833	1						
* 170	15	221	66	1	68	1	71	1	72	2	833	1	1359	9		
* 171	17	237	66	1	68	1	71	1	72	2	833	1	1361	11		
* 172	19	278	66	1	68	1	71	1	72	2	833	1	1363	13		
* 174	22	305	66	1	68	1	71	1	72	2	833	1	1366	16		
* 176	16	386	66	1	175	1	328	2	833	1	980	1				
* 185	11	253	59	1	63	1	66	1	68	1	72	2	206	1		
* 186	13	833	1353	1	63	1	66	1	68	1	72	2	206	1		
* 188	12	833	1355	1	60	1	63	2	66	1	68	1	72	2		
* 190	13	206	59	1	68	1	72	2	105	2	206	1	332	1		
* 199	3	557	750	1	833	1	1352	2								
* 213	3	363	137	1	138	1										
* 214	6	375	756	1	833	1										
* 215	4	298	338	1	459	1	614	1	639	1	833	1				
* 216	7	239	459	1	497	2	833	1								
* 218	4	253	239	1	230	1	459	1	471	1	833	1				
* 219	5	306	459	1	833	1	995	2								
* 222	1	306	457	1	459	1	614	1	833	1						
* 223	2	356	761	1												
* 225	2	333	493	1	494	1										
* 226	3	400	1421	1												
* 227	11	420	138	1	792	2	103	2	177	2	784	2				
* 228	1	244	98	1	99	1										
* 229	1	153	1321	1												
* 230	4	260	431	1	833	1	833	1								
* 231	4	260	74	1	833	1										
* 232	4	200	809	1	833	1										
* 233	8	263	830	2												
* 234	9	457	87	1	90	1	92	2	97	2	426	1				
* 235	10	457	87	1	90	1	92	2	97	2	98	2				
* 236	10	457	13	1	87	2	90	1	92	2	97	2				
* 237	10	457	13	1	90	1	95	1	98	1	242	1				
* 238	11	457	87	1	90	1	92	2	97	2	98	2				
* 239	12	457	87	1	90	1	92	2	97	2	98	2				
* 240	12	457	90	1	95	2	98	2	242	2	541	1				
* 241	10	457	87	1	90	1	92	2	97	2	98	2				
* 242	12	457	87	1	90	1	92	2	97	2	98	2				
* 243	10	457	87	1	90	1	92	2	97	2	98	2				
* 244	10	457	87	1	90	1	92	2	97	2	98	2				
* 245	10	457	87	1	90	1	92	2	97	2	98	2				
* 246	11	457	87	1	90	1	92	2	97	2	98	2				
* 247	11	457	87	1	90	1	92	2	97	2	98	2				
* 248	8	457	87	1	90	1	92	2	97	2	98	2				
* 249	7	457	87	1	90	1	92	2	97	2	98	2				
* 250	7	403	109	1	110	1	115	2	128	1						
* 251	8	403	89	1	109	1	110	1	128	1						
* 252	9	407	109	1	110	1	839	2	840	2	841	2				

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs														
** 253	9	396	72	NNN	100	2	110	1	115	2	235	1	843	1			
** 254	9	422	109	NNN	110	1	110	1	115	2	842	1					
** 255	16	448	109	NNN	110	1	110	1	115	2							
** 256	1	453	110	NNN	970	6	124	NNNN	2089	1							
** 257	1	394	109	NNN	110	1	110	1	115	2							
** 258	8	449	109	NNN	110	1	110	1	115	2							
** 260	8	319	110	NNN	165	1	110	1	115	2							
** 262	11	244	14	NNN	98	4	99	1	103	NNNN	801	2					
** 263	17	199	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1306	6			
** 264	14	213	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1303				
** 265	19	202	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1308				
** 266	13	227	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1302				
** 267	10	244	98	NNN	99	1	103	NN	174	NNNN	178	NNNN					
** 268	16	205	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1305	6			
** 269	23	205	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1314	14			
** 270	13	212	14	NNN	98	4	99	1	103	NNNN	178	NNNN	1304	4			
** 271	1	265	98	NNN	99	1	103	NN	544	NNNN							
** 272	12	226	14	NNN	14	1	98	NN	99	103	2	178	2				
** 274	1	244	98	NNN	103	2	242	NNNN	178	NNNN							
** 277	10	201	14	NNN	98	4	103	NNNN	178	NNNN	1302	2					
** 282	7	239	98	NNN	103	2	242	NNNN	178	NNNN							
** 284	11	264	87	NNN	98	4	103	NNNN	178	NNNN	1304	4					
** 287	13	204	14	NNN	98	4	103	NNNN	178	NNNN	1302	NNNN	1303	6			
** 295	11	214	13	NNN	14	1	98	NN	103	NNNN	178	NNNN	1302				
** 296	16	216	14	NNN	14	1	103	NNNN	178	NNNN	1302	NNNN	1306				
** 297	8	400	109	NNN	129	1	130	NNNN	242	NNNN	840	NNNN					
** 301	10	457	89	NNN	109	1	242	NNNN	797	NNNN	800	NNNN	801				
** 307	14	345	165	NNN	242	1	794	NNNN	165	NNNN	178	NNNN	797				
** 308	13	216	10	NNN	14	1	103	NNNN	165	NNNN	178	NNNN	797				
** 309	11	1302	2														
** 310	14	318	10	NN	103	2	165	1	242	2	797	2	799				
** 310	14	290	10	NN	103	2	165	2	242	2	794	2	795				
** 311	11	243	455	NNN	930	1	645	1	707	1							
** 314	14	203	645	NNN	572	1	645	1	2042	4							
** 315	15	308	645	NNN	707	1	645	1	848	4							
** 316	10	308	645	NNN	707	1	645	1	848	4							
** 317	1	308	645	NNN	707	1	645	1	848	4							
** 318	1	308	645	NNN	707	1	645	1	848	4							
** 319	11	408	97	NNN	457	2	459	1	614	1	645	2	666	2			
** 320	13	667	97	NN	459	1	614	1	645	2	654	3	684	2			
** 321	14	840	89	NN	97	2	459	1	614	1	645	2	686	2			
** 322	13	339	1001	NN	97	2	459	1	614	1	645	2	684	2			
** 322	13	338	89	NN	97	2	459	1	614	1	645	2	684	2			
** 323	14	840	97	NN	115	1	503	2	627	1	645	2	646	5			
** 323	14	348	840	NN	97	2	459	1	614	1	645	2	684	2			
** 324	9	649	96	NNN	1	1	97	NNNN	503	NNNN	645	NNNN	651				
** 325	12	353	97	NNN	115	1	503	NNNN	645	NNNN	645	NNNN	842	1			
** 326	11	368	97	NNN	115	1	503	NNNN	645	NNNN	645	NNNN	840				
** 327	11	373	97	NNN	115	1	503	NNNN	645	NNNN	645	NNNN	840				
** 328	11	388	97	NNN	115	1	503	NNNN	645	NNNN	645	NNNN	840				
** 328	11	408	97	NNN	115	1	503	NNNN	645	NNNN	645	NNNN	840				
** 329	11	952	2														
** 330	11	413	97	NNN	503	2	645	NN	663	1	664	2	665	2			
** 331	13	428	97	NNN	503	2	645	NN	666	1	667	1					
** 332	7	448	97	NNN	503	2	645	NN	668	1	671	3	953	2			
** 333	13	333	97	NNN	503	2	645	NN	668	1	671	3	953	2			
** 334	15	388	503	NNN	645	4	1301	NNNN	2132	NNNN							
** 335	11	393	97	NNN	503	2	645	NN	678	4	682	1	959	1			
** 336	14	338	89	NN	97	2	459	NN	614	1	639	1	645	2			
** 337	13	643	840	NN	97	2	459	2	459	1	614	1	645	2			
** 338	14	840	89	NN	97	2	459	1	614	1	639	1	645	2			
** 339	9	683	840	NN	97	2	459	1	614	1	645	2	673	1			

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs															
* 400	6	333	459	1	614	1	686	2	833	1	1001	1						
* 401	6	333	459	1	614	1	833	1	1024	1	1039							
* 402	6	333	459	1	614	1	833	1	1033	1	1038							
* 403	6	333	459	1	614	1	833	1	1001	1	1037							
* 404	6	333	459	1	614	1	833	1	1024	1	1036							
* 405	6	333	459	1	614	1	833	1	1033	1	1035							
* 406	6	333	459	1	614	1	542	2	614	1	833	1	1034					
* 407	7	338	459	1	614	1	833	1	1001	1	1029	1	1033					
* 408	7	317	459	1	614	1	833	1	1024	1	1031	1	1033					
* 409	7	360	175	1	367	2	459	1	614	1	785	1	833					
* 410	8	343	64	2	175	1	459	1	614	1	698	1	785					
* 411	8	833	457	2	459	1	614	1	833	1	1001	1	1029	1				
* 412	8	1030	175	1	457	2	459	1	614	1	781	1	785	1				
* 413	6	833	175	1	459	1	614	1	833	1	1027							
* 414	6	333	459	1	614	1	833	1	1024	1	1025							
* 415	6	333	175	1	459	1	614	1	833	1	1023							
* 416	9	422	175	1	459	1	614	1	639	1	683							
* 417	8	785	175	1	459	1	614	1	833	1	1022	3	2050	1				
* 418	8	333	459	1	614	1	833	1	851	1	1021	4						
* 419	8	333	459	1	614	1	833	1	910	2								
* 420	8	333	459	1	614	1	833	1	986	2								
* 421	8	333	243	2	243	1	993	2	1008	2	1010	1						
* 422	15	304	72	2	242	2	243	1	1008	2	1009	1	1010	1				
* 423	17	1356	72	2	242	2	243	1	1008	2	1009	1	1010	1				
* 424	19	1358	72	2	242	2	243	1	1008	2	1009	1	1010	1				
* 425	11	1360	11	2	12	2	243	1	1019	2	1304	4						
* 426	12	390	11	2	12	2	1016	2	1017	2	1304	4						
* 427	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 428	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 429	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 430	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 431	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 432	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 433	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 434	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 435	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 436	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 437	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 438	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 439	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 440	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 441	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 442	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 443	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 444	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 445	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 446	12	393	11	2	12	2	1016	2	1017	2	1304	4						
* 447	14	840	100	2	100	2	1096	6	2044	2	2089	3						
* 448	12	503	666	2	667	1	1096	6	2044	2	2089	3						
* 449	12	478	666	2	667	1	1096	6	2044	2	2089	3						
* 450	9	423	89	2	840	1	1096	6	2044	2	2089	3						
* 451	6	433	92	2	100	2	673	1	1101	1								
* 452	6	483	100	2	666	2	667	1	673	1								
* 453	10	453	89	2	100	2	840	1	1102	2	1103	1						
* 454	10	438	89	2	100	2	840	1	1107	2	1108	1						
* 455	12	438	89	2	100	2	840	1	1107	2	1108	1						
* 456	10	448	89	2	100	2	840	1	1107	2	1108	1						
* 457	10	448	89	2	100	2	840	1	1107	2	1108	1						
* 458	12	473	92	2	100	2	827	2	840	2	1101	1						
* 459	8	1101	92	2	100	2	657	1	840	1	840	1	952	2				
* 460	8	478	92	2	100	2	1101	1	1107	2	1108	1						
* 461	10	423	89	2	100	2	1101	1	1107	2	1108	1						
* 462	8	453	100	2	666	2	667	1	1101	1								
* 463	8	448	100	2	666	2	667	1	1101	1								
* 464	8	478	100	2	666	2	667	1	1101	1								
* 465	4	501	100	2	666	2	667	1	1101	1								
* 466	7	503	100	2	666	2	667	1	1101	1								
* 467	10	503	100	2	666	2	667	1	1101	1								
* 468	8	478	100	2	666	2	667	1	1101	1								
* 469	10	503	100	2	666	2	667	1	1101	1								
* 470	8	1117	100	2	666	2	667	1	1118	3	1119	1						
* 471	10	473	100	2	666	2	667	1	1118	3	1119	1						
* 472	10	449	89	2	666	2	667	1	1118	3	1119	1						
* 473	10	478	100	2	666	2	667	1	1118	3	1119	1						
* 474	8	453	96	1	100	2	651	2	666	2	667	1						

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs															
* 551	16	374	795	2	1006	2	1403	3	1405	5	1725	2	2041	2				
* 552	14	398	165	1	795	2	1006	3	1403	5	1725	2	2041	2				
* 554	18	441	165	1	454	1	1006	2	1725	2	1725	2	2041	2				
* 555	9	475	100	1	1006	2	1402	2	1698	2	2040	2						
* 556	8	447	165	1	795	2	1156	1	1753	2	2041	2						
* 558	7	203	162	1	163	2	179	4										
* 559	17	293	10	2	103	2	165	1	733	2	768	2	797	2				
		1012	1	1072	1	1454	4											
* 560	6	190	263	2	421	2	874	1	884	1								
* 566	10	393	795	2	1156	1	1403	3	1753	2	2041	2						
* 569	2	345	169	2														
* 570	8	439	109	2	110	1	827	3	840	2								
* 571	10	446	109	2	110	1	171	1	173	4	840	2						
* 573	6	315	180	1	185	2	459	1	614	1	833	1						
* 574	7	300	180	1	459	1	614	1	768	2	833	1	1142	1				
* 575	8	293	166	1	180	1	459	1	614	1	768	2	833	1				
		1142	1															
* 576	9	264	180	1	459	1	614	1	768	2	833	1	1142	1				
		1452	2															
* 577	11	263	180	1	459	1	614	1	768	2	833	1	1142	1				
		1454	4															
* 578	13	255	180	1	459	1	614	1	768	2	833	1	1142	1				
		1456	6															
* 579	5	327	187	2	459	1	614	1	833	1								
* 580	6	323	189	1	191	3	459	1	833	1								
* 581	7	283	56	1	57	1	190	1	191	3	833	1						
* 582	5	404	193	1	328	2	817	1	1124	1								
* 583	4	309	107	1	194	2	833	1										
* 585	18	283	10	4	11	2	103	2	197	2	445	2	797	2				
		1402	4															
* 586	17	288	10	4	11	2	103	2	165	1	197	2	445	2				
		797	2	1402	4													
* 587	16	301	10	4	11	2	103	2	197	2	445	2	797	2				
		1402	2															
* 588	18	268	10	2	11	2	98	2	103	2	197	2	445	2				
		1304	4	1402	2													
* 589	17	296	10	2	11	2	98	2	103	2	197	2	445	2				
		1303	3	1402	2													
* 590	16	296	10	2	11	2	98	2	103	2	197	2	445	2				
		1302	2	1402	2													
* 591	18	261	10	2	11	2	12	2	103	2	445	2	797	2				
		1304	4	1402	2													
* 592	17	279	10	2	11	2	12	2	103	2	165	1	445	2				
		797	2	1304	4													
* 593	16	272	10	2	11	2	12	2	103	2	445	2	797	2				
		1304	4															
* 596	3	457	138	1	195	2												
* 599	14	299	103	2	165	1	203	2	242	2	452	1	794	2				
		795	2	797	2													
600	12	450	100	1	1006	2	1405	5	1698	2	2040	2						
601	22	238	4	6	87	2	103	2	142	1	297	6	846	2				
		874	1	1015	2													
602	9	304	10	2	165	1	205	2	207	2	797	2						
603	11	263	25	16	127	2	295	2	874	1								
604	7	426	242	2	243	1	1008	2	1154	2								
* 606	6	411	242	2	243	1	801	2	1071	1								
* 613	3	268	403	2	833	1												
* 614	3	171	120	1	122	2												
* 618	4	233	159	2	849	2												
* 622	4	200	304	2	891	2												
* 623	4	215	307	2	849	2												
* 625	4	173	13	1	121	1	123	2										
* 631	6	302	74	1	229	1	833	1	2031	1								
* 635	9	320	59	1	60	1	72	2	274	2	349	1	833	1				
		856	1															
* 636	7	333	64	2	274	2	349	1	833	1	856	1						
* 639	16	359	274	2	311	2	833	1	856	1								
* 640	10	322	59	1	72	2	274	2	349	1	833	1	856	1				
		1354	2															
* 641	8	327	59	1	72	2	274	2	349	1	833	1	856	1				

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 760	5	208	163	1	179	2	441	2								
* 761	7	228	162	1	442	4	443	2								
* 762	19	223	162	1	163	2	181	2	183	2	768	4	1454	8		
* 765	9	234	10	2	103	2	110	1	797	2	1402	2				
* 767	8	220	191	3	548	1	572	1	584	1	645	1	707	1		
* 768	4	248	436	2	645	1	707	1								
* 770	6	238	26	1	507	2	981	1	982	1	1076	1				
* 771	7	251	26	1	28	1	509	2	981	1	982	1	1076	1		
* 788	9	340	59	1	60	1	63	1	72	2	373	1	420	1	631	1
* 793	10	631	833	1	63	1	72	2	373	1	420	1	631	1		
* 796	11	833	1352	1												
* 798	8	448	130	1	1006	2	1404	4	1698	2	2040	2				
* 799	8	488	96	1	165	1	1006	2	1697	2	2040	2				
* 800	4	245	460	6	461	1	874	1								
* 803	12	248	462	3	874	1										
* 804	13	190	223	6	462	3	874	3								
* 806	25	198	223	6	734	2	746	2	874	3						
		252	10	2	421	4	467	4	468	2	469	2	874	1		
* 807	23	884	2	1408	8											
		235	10	2	421	4	467	4	468	2	469	2	874	1		
* 808	21	884	2	1406	6											
		239	10	2	421	4	467	4	468	2	469	2	874	1		
* 809	19	884	2	1404	4											
		238	10	2	421	4	467	4	468	2	469	2	874	1		
* 810	17	884	2	1402	2											
		236	10	2	421	4	467	4	468	2	469	2	874	1		
* 811	16	884	2	421	4	467	4	468	2	469	2	494	1	874	1	
		225														
* 812	7	884	2													
* 825	9	250	56	1	57	1	58	1	181	1	470	2	833	1		
* 826	9	276	452	1	525	2	592	2	595	4						
* 826	9	275	526	2	592	2	595	4	643	1						
* 827	14	270	592	4	595	2	1406	6								
* 828	17	266	26	2	433	2	528	4	529	4	592	2	1403	3		
* 829	16	277	59	1	72	2	103	2	203	2	422	1	452	1		
		483	1	733	2	797	2	1352	2							
* 830	8	522	165	1	667	1	1006	2	1703	2	2040	2				
* 832	7	241	26	1	28	1	768	2	981	1	982	1	1076	1		
* 833	7	231	26	1	28	1	29	2	981	1	982	1	1076	1		
* 834	7	225	26	1	28	1	609	2	981	1	982	1	1076	1		
* 835	6	221	26	1	45	2	981	1	982	1	1076	1				
* 837	4	146	223	3	874	1										
* 841	4	180	266	4	874	1										
* 842	7	179	64	1	162	1										
* 843	11	185	59	1	63	1	163	2	548	1	572	1	645	1		
		707	1	1353	3											
* 845	24	183	223	12	710	6	874	5	965	1						
* 846	9	189	59	1	60	1	63	1	72	2	548	1	572	1		
		645	1	707	1											
* 847	7	195	63	1	548	1	549	2	572	1	645	1	707	1		
* 848	5	187	162	1	636	4										
* 849	13	197	98	2	99	2	102	2	426	1	538	2	1302	4		
* 850	11	197	98	2	99	1	102	2	538	2	1302	4				
* 851	14	187	102	2	538	2	545	2	1308	8						
* 852	20	188	223	6	538	2	874	4	1151	1						
* 853	8	199	102	2	538	2	1304	4								
* 854	7	201	102	2	538	2	1305	4								
* 855	20	191	223	6	710	6	874	5	965	1						
* 856	6	203	13	1	468	1	588	1								
* 857	17	198	60	1	72	1	572	1	645	1	707	1				
* 858	13	193	102	2	538	2	545	1	1308	8						
* 859	9	201	72	2	538	2	572	1	645	1	707	1	1353	3		
* 860	12	198	102	2	538	2	1308	8								
* 861	26	198	24	2	100	1	223	12	710	6	874	5				
* 862	3	204	637	3												
* 863	12	200	223	3	710	6	874	2	965	1						
* 864	6	206	61	2	548	1	572	1	645	1	707	1				
* 865	16	201	223	6	710	6	874	3	965	1						
* 866	7	207	63	1	64	2	548	1	572	1	645	1	707	1		

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Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs														
* 867	7	213	63	1	546	1	547	1	548	1	549	2	551	1			
* 868	15	203	103	2	445	2	561	2	563	2	841	4	846	2			
		847	1														
* 870	9	214	98	2	99	2	102	2	426	1	538	2					
* 871	9	204	102	1	184	1	546	1	630	1							
* 872	9	210	431	2	630	2	1303	2									
* 873	9	218	99	1	431	1	645	2									
* 874	9	218	546	1	547	1	551	1	554	2							
* 875	9	218	295	1	543	1											
* 876	12	221	10	2	13	1	14	2	103	2	165	1	178	2			
		797	2														
* 877	13	221	10	2	13	1	14	2	103	2	178	2	797	2			
		1402	2														
* 878	13	223	98	1	435	2	630	1	707	1							
* 879	13	254	572	1	573	2	645	1	707	1							
* 880	13	246	572	1	575	2	645	1	707	1							
* 881	8	271	572	1	576	1	581	4	645	1	707	1					
* 882	23	236	98	6	99	2	103	2	181	1	183	1	445	2			
		561	2	574	1	586	1	790	2	1453	3						
* 883	26	195	98	8	99	3	103	2	181	1	183	1	445	2			
		561	2	574	1	586	1	790	2	1453	3						
* 884	20	283	98	4	99	1	103	2	181	1	183	1	445	2			
		561	2	574	1	586	1	790	2	1453	3						
* 890	8	298	13	1	87	1	98	1	103	2	142	1					
* 891	10	273	87	2	98	2	103	2	142	1	1303	3					
* 892	9	280	87	2	98	2	103	2	142	1	1302	2					
* 893	10	265	98	4	99	1	103	2	590	2	591	1					
* 894	6	216	14	1	98	1	103	1	178	1	1302	2					
* 895	4	245	14	1	98	1	103	1	178	1							
* 896	7	202	14	1	98	1	103	1	178	1	1303	3					
* 897	8	228	14	1	98	1	103	1	178	1	1304	4					
* 898	16	251	14	1	98	1	103	1	178	1	1305	5					
* 899	9	233	14	1	98	1	103	1	178	1	1305	5					
* 900	13	248	14	1	98	1	103	1	178	1	1309	9					
* 901	9	258	98	2	103	2	599	2	601	1	1302	2					
* 902	8	262	13	1	98	1	103	2	599	2	601	1					
* 903	12	266	87	2	98	2	103	2	142	1	1305	5					
* 904	16	248	10	2	103	2	107	1	108	1	178	2	291	2			
		768	2	797	2	1402	2										
* 905	15	248	10	2	103	2	107	1	108	1	165	1	178	2			
		291	2	768	2	797	2										
* 906	8	259	14	2	98	2	103	2	178	2							
* 907	22	221	4	2	103	2	242	2	243	1	297	6	846	2			
		874	1	1015	2	103	2	165	1	596	2	597	2	797	2		
* 908	13	218	10	2	103	2	165	1	596	2	597	2	797	2			
		1402	2														
* 909	16	235	10	2	102	2	103	2	178	2	295	2	593	2			
		797	2	1402	2	102	2	103	2	165	1	178	2	295	2		
* 910	15	233	10	2	102	2	103	2	165	1	178	2	295	2			
		593	2	797	2												
* 911	3	245	531	1	535	1											
* 914	7	220	98	1	99	1	102	2	538	2							
* 915	9	233	98	1	99	1	102	2	538	2	545	2					
* 916	4	228	13	1	102	2	295	1									
* 917	4	226	184	1	546	1	551	1									
* 918	6	223	4	1	546	1	555	2									
* 919	4	246	102	1	538	2											
* 920	6	249	102	1	538	2	545	2									
* 921	6	286	538	1	539	1	559	2									
* 922	7	266	538	1	539	1	545	2	559	2							
* 923	2	211	578	1	579	1											
* 924	7	213	295	1	382	2	555	2	841	2							
* 925	6	282	14	1	102	1	424	1	556	1	1302	2					
* 926	13	231	4	2	103	2	445	2	561	2	563	2	846	2			
* 927	17	267	11	2	12	2	98	4	99	1	103	2	445	2			
		1304	4														
* 928	20	250	11	2	12	2	98	6	99	2	103	2	445	2			
		1304	4														
* 929	8	256	710	6	874	1	965	1									

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 930	6	120	521	1	874	1	924	4								
* 931	1	263	226	6	710	6	874	2	965	1						
* 932	2	211	224	1	100	1	223	9	710	6	874	4				
* 933	18	221	224	1	100	1	223	9	710	6	874	4				
* 934	20	221	223	9	874	4	1151	1	1152	6						
* 935	9	245	162	1	1062	6	2212	2								
* 936	7	256	162	1	625	2	634	4								
* 939	5	267	162	1	629	4										
* 940	7	259	644	1	647	6										
* 941	3	240	12	3	519	1										
* 942	4	173	588	1	589	1										
* 943	4	191	508	1	602	1										
* 944	9	267	13	1	468	2	603	2	605	1	606	3				
* 945	9	325	13	1	468	2	605	1	606	3	607	2				
* 946	8	223	608	1	610	1	612	4								
* 947	19	269	58	2	59	2	72	4	615	1	616	1	639	1		
* 948	6	807	459	1	1353	6										
* 949	8	270	60	1	614	2	639	1	653	2	833	1	639	1		
		263	60	1	153	1	459	1	614	1	658	1				
		833														
* 950	6	224	59	1	72	2	459	1	471	1	833	1				
* 951	12	242	74	1	235	1	748	2	833	1	1357	7				
* 952	4	255	493	3	809	1										
* 953	9	246	385	4	630	3	1303	3								
* 954	10	245	385	4	630	3	1304	4								
* 955	12	243	385	4	630	3	1306	6								
* 956	14	231	385	4	630	3	1308	8								
* 957	9	220	98	2	103	2	110	1	1304	4						
* 958	11	240	14	1	103	1	178	1	655	1	656	1	669	1		
		1305														
* 959	14	231	14	1	98	1	103	1	178	1	655	1	656	2		
		1302														
* 960	12	237	14	1	103	1	178	1	658	2	674	1	692	1		
		1305														
* 961	14	231	14	1	704	1	706	2	1106	1	1309	9				
* 962	15	225	14	1	699	1	700	2	704	1	1106	1	1309	9		
* 963	15	241	14	1	699	1	704	2	709	2	1106	1	1309	9		
* 964	15	259	26	3	433	3	477	2	529	4	711	1	1404	4		
* 965	14	260	26	3	433	3	529	4	724	2	1404	4				
* 966	9	255	80	2	256	2	592	2	594	1	773	1	1402	2		
* 967	16	247	26	2	80	1	433	2	529	4	711	1	768	2		
		1404														
* 968	11	263	26	1	433	1	477	2	529	2	592	1	725	1		
		1403														
* 970	14	274	58	1	59	1	148	2	290	2	557	1	615	1		
		619														
* 972	9	238	56	1	57	1	58	1	59	1	743	2	833	1		
		1352														
* 973	10	250	56	1	57	1	58	1	59	3	63	1	743	2		
		833														
* 975	8	206	675	1	676	6	874	1								
* 976	14	245	58	2	59	2	60	2	72	4	691	2	1162	1		
		1163														
* 977	5	204	98	2	99	2	426	1								
* 978	7	231	72	1	679	1	1164	1	1165	1	1352	2				
* 979	8	246	72	1	679	1	1164	1	1165	1	1353	3				
* 980	10	245	72	1	679	1	1164	1	1165	1	1355	5				
* 981	12	212	72	1	679	1	1164	1	1165	1	1357	7				
* 982	7	254	59	1	60	1	72	2	681	1	1165	1	1166	1		
* 983	7	270	58	1	59	1	72	2	688	1	1165	1	1167	1		
* 984	8	245	58	1	59	1	60	1	72	2	688	1	1165	1		
		1167														
* 985	9	237	58	1	59	1	72	2	688	1	1165	1	1167	1		
		1352														
* 986	10	244	58	1	59	1	72	2	688	1	1165	1	1167	1		
		1353														
* 987	11	220	58	1	59	1	72	2	688	1	1165	1	1167	1		
		1354														
* 988	12	210	58	1	59	1	72	2	688	1	1165	1	1167	1		
		1355														

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs															
* 989	14	218	58	1	59	1	72	2	688	1	1165	1	1167	1				
* 990	16	1357	58	1	59	1	72	2	688	1	1165	1	1167	1				
* 991	7	218	72	2	638	1	639	1	726	1	1165	1	1166	1				
* 992	9	270	72	2	638	1	639	1	726	1	1165	1	1166	1				
* 993	11	1352	72	2	638	1	639	1	726	1	1165	1	1166	1				
* 994	13	220	72	2	638	1	639	1	726	1	1165	1	1166	1				
* 995	11	1354	58	1	59	3	60	1	63	1	72	2	688	1				
* 996	8	222	58	1	72	2	638	1	639	1	731	1	1164	1				
* 997	10	1356	58	1	72	2	638	1	639	1	731	1	1164	1				
* 998	12	228	58	1	72	2	638	1	639	1	731	1	1164	1				
* 999	14	1165	58	1	72	2	638	1	639	1	731	1	1164	1				
* 1000	16	213	58	1	72	2	638	1	639	1	731	1	1164	1				
* 1001	8	1165	58	1	59	2	61	2	688	1	1165	1	1167	1				
* 1002	9	243	58	1	59	2	63	1	64	2	688	1	1165	1				
* 1003	12	1167	58	1	59	4	63	2	64	2	688	1	1165	1				
* 1004	10	229	58	2	64	4	689	1	690	1	691	2	691	2				
* 1005	12	1167	58	2	59	2	72	4	689	1	690	1	691	2				
* 1006	16	263	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1007	18	1352	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1008	20	198	58	2	59	2	72	4	689	1	690	1	691	2				
* 1009	22	1353	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1010	24	180	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1011	26	1355	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1012	16	175	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1013	22	1356	58	2	59	2	72	4	691	2	1162	1	1163	1				
* 1014	14	193	58	2	59	2	229	6	557	2	691	2	1168	1				
* 1015	16	243	58	2	59	2	60	2	72	4	105	4	230	2	234	2		
* 1016	20	1169	58	2	59	6	60	2	63	2	72	4	691	2				
* 1017	24	188	58	2	59	6	63	2	72	4	691	2	1168	1				
* 1018	20	1168	58	2	59	8	61	4	63	2	691	2	1168	1				
* 1019	22	1169	58	2	59	8	63	4	64	4	691	2	1168	1				
* 1020	26	201	58	2	59	10	60	2	63	4	72	4	691	2				
* 1021	26	203	58	2	59	12	61	4	63	4	691	2	1168	1				
* 1022	28	1168	58	2	59	12	63	6	64	4	691	2	1168	1				
* 1023	32	216	58	2	59	14	60	2	63	6	72	4	691	2				
* 1029	15	202	58	2	59	14	60	2	63	6	72	4	691	2				
* 1030	10	1169	58	2	59	14	60	2	63	6	72	4	691	2				
* 1031	7	187	58	2	59	14	60	2	63	6	72	4	691	2				
* 1033	9	258	58	2	59	14	60	2	63	6	72	4	691	2				
* 1038	12	293	58	2	59	14	60	2	63	6	72	4	691	2				

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 1040	2	319	454	1	1071	1										
* 1041	21	249	10	2	26	4	103	2	242	2	243	1	452	2		
		797	1402	6												
* 1042	6	243	13	1	468	2	759	3								
* 1043	6	258	4	3	13	1	830	2								
* 1045	11	236	72	2	74	1	235	1	833	1	1356	6				
* 1046	14	241	72	2	74	1	235	1	833	1	1359	9				
* 1047	1	167	770	1												
* 1048	18	201	14	2	98	2	103	2	178	2	1304	4	1306	6		
* 1049	18	194	14	2	103	2	178	2	382	2	841	2	846	2		
		1306														
* 1050	18	202	14	2	178	2	435	4	630	2	1000	2	1306	6		
* 1051	7	239	162	1	443	2	621	4								
* 1052	14	213	56	1	57	1	58	1	59	1	72	2	833	1		
		1357														
* 1053	9	244	162	1	542	4	625	2	632	2						
* 1054	7	243	162	1	443	2	793	4								
* 1055	12	263	56	1	57	1	58	1	59	1	833	1	864	1		
		1051	1052	1	1070	3										
* 1056	14	258	56	1	57	1	58	1	59	1	693	4	694	1		
		833	864	1	1051	2	1052	1								
* 1057	18	251	40	3	72	6	148	2	615	1	780	1	802	1		
		809	814	3												
* 1058	17	246	56	1	57	1	60	3	72	6	780	1	802	1		
		814	833	1												
* 1059	11	265	58	1	59	3	63	1	72	2	148	2	615	1		
		809														
* 1060	9	257	693	4	796	1	818	1	819	2	821	1				
* 1061	11	262	60	1	72	2	693	4	796	1	818	1	821	1		
		985														
* 1062	3	258	824	3												
* 1063	10	263	72	2	693	4	796	1	818	1	821	1	985	1		
* 1064	9	271	72	4	818	2	822	1	985	2						
* 1065	11	207	162	1	163	2	181	2	183	2	768	4				
* 1066	13	210	162	1	163	2	166	2	181	2	183	2	790	4		
* 1067	9	244	63	1	230	1	548	1	572	1	645	1	707	1		
		828														
* 1068	10	231	59	1	63	2	548	1	572	1	645	1	707	1		
		743	826	1												
* 1069	8	235	59	1	63	1	548	1	572	1	645	1	707	1		
		743														
* 1070	7	245	63	1	548	1	572	1	645	1	707	1	870	2		
* 1071	6	250	235	1	572	1	645	1	707	1	743	2				
* 1073	12	248	26	1	28	1	768	2	981	1	982	1	1076	1		
		1455														
* 1074	15	215	98	2	103	2	181	1	255	2	445	2	561	2		
		574	586	1	1302	2										
* 1075	17	193	98	2	103	2	166	1	181	1	183	1	445	2		
		561	574	1	586	1	790	2	1302	1						
* 1076	19	177	98	2	103	2	181	1	183	1	445	2	561	2		
		574	586	1	790	2	1302	2	1453	3						
* 1077	21	163	98	2	103	2	181	1	183	1	445	2	561	2		
		574	586	1	790	2	1302	2	1455	5						
* 1078	20	231	10	4	43	2	44	1	46	2	99	4	165	2		
		539	797	4												
* 1079	15	215	10	2	14	2	26	2	103	2	178	2	452	1		
		797	1302	2												
* 1080	49	211	10	2	11	2	12	2	26	14	103	2	445	2		
		452	797	2	1304	4	1402	12								
* 1081	43	223	10	2	11	2	12	2	26	14	98	2	99	1		
		103	445	2	452	7	797	2	1402	12						
* 1082	50	239	10	4	11	2	26	16	103	2	197	2	445	2		
		452	797	2	1402	12										
* 1084	44	245	10	2	14	2	103	2	445	2	452	7	797	2		
		1153	1161	1	1402	12										
* 1085	15	198	10	2	14	2	103	2	165	1	178	2	797	2		
		1304														
* 1086	16	216	10	2	14	2	103	2	165	1	178	2	797	2		
		1305														

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs															
* 1087	21	263	26	4	452	2	791	2	1050	2	1063	2	1403	3				
* 1088	19	1406	26	6	452	4	791	2	1050	2	1111	2	1403	3				
* 1089	22	253	26	7	452	4	791	2	1050	2	1063	1	1111	1				
		248	26	3														
* 1090	11	1402	10	2	165	1	179	2	797	2	975	2	979	1				
		221	10	2														
* 1091	12	988	10	2	165	1	181	1	772	2	797	2	975	2				
		221	10	2														
* 1092	13	979	10	2	165	1	181	1	183	1	768	2	797	2				
		224	10	2														
* 1093	14	975	10	2	165	1	166	1	181	1	183	1	768	2				
		221	10	2														
* 1094	14	797	10	2	165	1	181	1	183	1	256	2	773	1				
		221	10	2														
* 1095	9	797	10	2	165	1	797	2	975	2	992	2						
		247	10	2														
* 1096	11	248	10	2	165	1	768	2	797	2	975	2	989	1				
		990	10	2														
* 1097	9	254	10	2	165	1	797	2	975	2	991	2						
* 1098	11	239	10	2	165	1	797	2	975	2	994	1	1046	3				
* 1099	21	239	10	2	421	4	467	4	468	2	469	2	493	2				
		494	10	2	884	2												
* 1100	33	220	10	2	263	4	421	8	467	4	468	2	469	2				
		874	10	2	1404	4												
* 1101	16	232	421	4	467	4	468	2	871	2	874	1	884	2				
		890	421	4														
* 1102	12	251	131	2	165	1	710	6	874	1	997	2						
* 1103	12	252	421	4	675	1	874	1	884	2	888	4						
* 1104	12	291	421	4	874	1	884	2	969	4	1144	1						
* 1105	24	260	263	4	421	8	874	3	884	4	969	4	1144	1				
* 1106	20	224	10	2	26	2	421	4	452	1	467	4	468	2				
		469	10	2	884	2												
* 1107	10	203	162	1	163	2	166	1	179	2	181	1	183	1				
		790	162	1														
* 1108	16	239	110	1	905	1	915	3	925	2	929	3	951	4				
		1008	110	1														
* 1109	8	236	10	2	103	2	110	1	165	1	797	2						
* 1110	8	227	98	2	103	2	110	1	1303	3								
* 1111	7	231	98	2	103	2	110	1	1302	2								
* 1112	14	228	98	8	99	3	103	2	110	1								
* 1113	11	230	98	6	99	2	103	2	110	1								
* 1114	8	246	98	4	99	1	103	2	110	1								
* 1115	14	237	58	2	59	2	60	2	72	4	689	1	690	1				
		691	58	2														
* 1116	20	188	58	2	59	2	72	4	691	2	1162	1	1163	1				
		1354	58	2														
* 1117	10	359	60	1	72	2	242	2	243	1	1008	2	1009	1				
		1010	60	1														
* 1118	12	335	72	2	242	2	243	1	1008	2	1009	1	1010	1				
		1353	72	2														
* 1119	14	314	72	2	242	2	243	1	1008	2	1009	1	1010	1				
		1355	72	2														
* 1120	8	276	693	4	796	1	821	1	1170	2								
* 1121	9	425	272	1	296	1	373	1	400	1	693	4	833	1				
* 1122	6	463	316	2	833	1	904	1	1171	1	1175	1						
* 1123	9	397	60	1	72	2	393	1	833	1	904	1	985	1				
		1171	60	1														
* 1124	6	394	833	1	860	1	1172	2	1173	2								
* 1125	7	386	64	2	833	1	860	1	1172	2	1174	1						
* 1126	8	367	59	1	72	2	833	1	860	1	1172	2	1174	1				
* 1127	9	355	59	1	60	1	72	2	833	1	860	1	1172	2				
		1174	59	1														
* 1128	10	334	59	1	72	2	833	1	860	1	1172	2	1174	1				
		1352	59	1														
* 1129	6	391	328	2	833	1	904	1	1024	1	1171	1						
* 1130	9	351	58	1	59	1	60	1	72	2	833	1	904	1				
		1024	58	1														
* 1131	7	438	272	1	299	1	373	1	393	1	819	2	833	1				
* 1132	8	420	72	2	272	1	299	1	373	1	393	1	833	1				
		985	72	2														

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs														
* 1133	9	381	60	1	72	2	272	1	299	1	373	1	393	1			
* 1139	10	833	985	1													
* 1140	11	283	72	NNNN	638	1	1106	NN	1134	1	1135	1	1136	1	1137	1	1138
* 1141	15	283	72	NNNN	638	1	1106	NN	1134	1	1135	1	1136	1	1137	1	1138
* 1142	21	283	72	NNNN	638	1	1106	NN	1134	1	1135	1	1136	1	1137	1	1138
* 1143	8	473	72	NNNN	557	1	2115	NNNN	2205	1	2206	1	2207	1	2208	1	2209
* 1144	9	358	60	1	72	2	557	NN	2115	NNNN	2205	NNNN	2206	NNNN	2207	NNNN	2208
* 1145	10	333	72	NNNN	557	1	1352	NN	2115	NNNN	2205	NNNN	2206	NNNN	2207	NNNN	2208
* 1146	11	327	72	NNNN	557	1	1352	NN	2115	NNNN	2205	NNNN	2206	NNNN	2207	NNNN	2208
* 1147	13	293	72	NNNN	557	1	1352	NN	2115	NNNN	2205	NNNN	2206	NNNN	2207	NNNN	2208
* 1148	17	263	72	NNNN	557	1	1352	NN	2115	NNNN	2205	NNNN	2206	NNNN	2207	NNNN	2208
* 1149	15	241	59	2	60	2	72	4	162	1	625	2	626	2	627	2	628
* 1150	11	270	64	4	162	1	625	2	698	2	1059	2					
* 1151	9	264	162	1	367	4	625	NN	1059	NN							
* 1152	11	229	71	2	72	4	162	1	625	2	632	2					
* 1154	7	265	162	1	625	2	625	4									
* 1155	6	669	100	1	1180	2	1181	NN									
* 1156	32	238	26	8	36	2	39	4	433	2	452	4	791	2			
* 1157	14	272	1050	2	1063	3	1402	6									
* 1158	20	1111	272	1	1402	2	165	1	452	2	791	2	1050	2	1063	1	
* 1159	18	1306	349	14	2	15	2	1184	2	1185	2	1187	2	1304	4		
* 1160	18	1306	340	14	2	15	2	1184	2	1185	2	1187	2	1304	8		
* 1161	22	1306	348	14	2	15	2	1184	2	1185	2	1187	2	1302	2		
* 1162	15	356	14	2	15	2	1184	2	1185	2	1187	2	1306	12			
* 1163	7	383	14	2	15	2	1187	NN	1190	NN	1306	6	2169	1			
* 1164	7	562	100	1	673	1	1194	NN	2060	NN							
* 1165	5	553	641	2	642	1	1196	NN	2060	NN							
* 1166	4	643	100	1	1194	2	2060	NN									
* 1167	4	541	1200	1	1201	2	1202	NN									
* 1168	4	513	100	1	1102	2	1103	NN									
* 1169	14	655	730	1	1103	2	1203	NN									
* 1170	17	425	89	3	97	2	840	NN	1204	2	1205	2	1207	1			
* 1171	13	1208	347	2	89	3	97	2	840	2	1204	2	1211	2	1213	2	
* 1172	16	1304	385	4	89	3	97	2	840	2	1204	2	1215	2	2179	2	
* 1173	20	417	89	3	97	2	840	NN	1204	2	1211	1	1218	1			
* 1174	5	1220	1	2206	3	4	89	3	97	2	431	2	627	1	830	1	
* 1175	11	349	840	2	1204	2	1211	3	1213	2	2180	1					
* 1176	10	561	100	1	1225	2	2143	NN									
* 1177	8	337	699	2	700	4	1106	NN	1226	1	1227	2					
* 1178	11	461	243	1	1019	2	1226	NN	1228	NN	1229	4					
* 1179	8	468	1207	1	1226	1	1228	NN	1230	NN	1231	2					
* 1180	6	329	11	2	12	2	1226	NN	1232	NN	1304	4					
* 1181	6	406	11	2	12	2	1226	NN	1232	NN	1233	1					
* 1182	6	491	1082	2	1226	1	1228	NN	1234	NN							
* 1183	6	543	1226	1	1228	2	1228	NN	1236	NN							
* 1184	17	490	100	1	1226	1	1228	NN	1236	NN	1237	2					
* 1185	9	423	1226	1	1228	2	1228	NN	1236	NN	1241	6	1304	4			
* 1186	13	279	1106	2	1226	1	1228	NN	1236	NN	1243	1					
* 1187	8	335	706	4	1106	2	1226	NN	1236	NN	1243	1					
* 1188	14	311	706	4	1106	2	1226	NN	1236	NN	1243	1					
* 1189	14	413	1226	1	1227	2	1243	NN	1243	NN	2145	3					
* 1190	4	428	970	6	1236	1	1244	NN	1245	NN	2089	3					
* 1191	8	463	970	6	1236	1	1244	NN	1245	NN							
* 1192	8	477	438	1	1236	1	1249	NN									
* 1193	6	495	1226	1	1249	2	1250	NN	1251	3	1257	2					
* 1194	6	381	13	1	1226	1	1254	NN	1255	2							
* 1195	6	501	1226	1	1258	3	1259	NN									
* 1196	6	405	1260	1	1261	1	1262	NN									
* 1197	4	353	1261	1	1263	4		NN									
* 1198	4	583	1264	1	1265	2	1266	NN									
* 1199	4	581	1264	1	1267	2	1268	NN									
* 1200	4	598	1071	1	1264	1	1269	NN									

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs									
* 1199	6	567	666	2	667	1	1264	1	1270	2		
* 1200	4	628	1271	3	1272	1						
* 1201	4	658	1273	3	1274	1						
* 1202	2	655	1275	1	1276	1						
* 1203	4	616	1277	1	1278	1	1277	2				
* 1204	5	646	1278	4	1279	3						
* 1205	5	655	1280	3	1281	3						
* 1206	6	625	100	1	1278	4	1282	2				
* 1207	6	642	100	1	1280	3	1283	2				
* 1208	4	605	1287	2	2146	1	2207	1				
* 1209	9	487	1019	1	1235	1	1290	2	1292	1	1293	2
		2187	1								2154	1
* 1210	8	531	96	1	1293	4	1295	2	2154	1		
* 1211	8	511	100	1	1293	4	1297	2	2154	1		
* 1212	10	408	4	3	13	2	830	2	1298	2	1299	1
* 1213	9	408	431	2	630	2	1298	2	1299	1	1302	2
* 1214	10	383	1298	1	1299	1	1307	7				
* 1215	5	613	712	2	1500	1	1501	2				
* 1216	4	591	1502	1	1503	2	1504	1				
* 1217	4	613	1503	1	1505	1	1506	1	1507	1		
* 1218	4	695	1101	1	1500	1	1507	1				
* 1219	4	623	130	1	1500	1	1508	1				
* 1220	7	490	1500	1	2058	2	2067	4				
* 1221	8	593	100	2	666	2	667	1	1500	1	1513	2
* 1222	8	513	1500	1	1578	4	2058	2	2063	1		
* 1223	8	547	1500	1	1583	4	2058	2	2182	1		
* 1224	8	459	1500	1	1586	4	2058	2	2183	1		
* 1225	4	618	641	1	1500	1	1523	1				
* 1226	4	659	1527	2	2061	2						
* 1227	3	639	2061	2	2062	1						
* 1228	7	498	100	2	673	1	1530	2	2061	2		
* 1229	8	486	100	2	1113	2	1530	2	2061	2		
* 1231	5	568	1527	1	1531	1	2061	2				
* 1232	9	479	100	3	673	1	1530	2	2061	2		
* 1233	9	576	100	1	1535	1	1536	4	2150			
* 1234	12	510	782	4	1540	1	1543	2	2063	1	2066	1
* 1235	11	552	584	4	781	1	1542	2	2065	1		
* 1236	7	586	1547	4	2065	1	2066	1				
* 1237	13	494	60	2	71	1	1549	1	2065	2	2066	1
* 1239	9	603	100	1	1535	1	1551	4	2150	2		
* 1240	9	551	542	4	1549	2	2065	2	2066	1		
* 1241	7	638	1553	4	2065	1	2066	1				
* 1242	9	568	367	4	1542	2	2065	2	2066	1		
* 1243	9	508	383	4	1542	2	2065	2	2066	1		
* 1244	13	478	383	4	1558	2	1559	4	2148	2	2149	1
* 1245	6	677	1565	2	2067	4						
* 1246	5	593	2066	1	2166	4						
* 1247	9	533	1084	2	1085	1	2067	4	2184	2		
* 1248	11	552	243	1	1019	2	1235	2	1573	2	2067	4
* 1249	9	537	109	2	110	1	1535	2	2067	4		
* 1250	11	559	109	2	242	1	1535	2	2067	4		
* 1251	18	450	14	2	109	2	178	2	1306	6	1535	4
* 1252	11	561	87	1	109	1	142	1	1535	2	2067	4
* 1253	13	545	639	2	683	2	781	2	1542	2	2065	2
* 1254	9	428	100	1	1535	2	1574	4	2150	1		
* 1255	18	463	383	4	1059	4	1540	2	1543	4	1544	2
		2066	1								2063	1
* 1256	14	469	383	4	1059	2	1540	2	1543	2	1544	2
		2066	1								2066	1
* 1257	10	478	383	4	1540	2	1544	2	2063	1	2066	1
* 1258	6	551	1580	4	2063	1	2066	1				
* 1259	5	638	2067	4	2068	1						
* 1260	6	595	1578	4	2063	1	2068	1				
* 1262	12	526	243	1	1019	2	1235	2	1573	2	1578	4
* 1263	15	603	623	2	1016	2	1235	2	1573	2	1578	4
		1582	1								2063	1
* 1264	12	613	104	2	142	1	1235	2	1573	2	1578	4
* 1265	10	513	109	2	110	1	1535	2	1578	4	2063	1
* 1267	7	683	1565	4	1583	4	2182	1				
* 1269	6	571	1583	4	2068	1	2182	1				

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 1270	10	527	1084	2	1085	1	1583	4	2182	1	2184	2				
* 1271	10	571	243	1	1019	2	1583	2	1573	2	1583	2	2182	1		
* 1272	10	539	104	2	142	1	1583	2	1573	2	1583	2	2182	1		
* 1273	10	510	109	2	110	1	1583	2	1583	4	2182	1	2182	1		
* 1274	10	513	1084	2	1085	1	1586	4	2183	1	2184	2				
* 1275	10	501	243	1	1019	2	1235	2	1573	2	1586	4	2183	1		
* 1276	10	501	104	2	142	1	1235	2	1573	2	1586	4	2183	1		
* 1277	4	581	1591	2	2062	1	2152	1								
* 1278	6	436	243	1	1019	2	1592	1	1593	2						
* 1279	6	663	1527	2	1594	2	2185	1								
* 1280	4	569	1594	2	2062	1	2185	1								
* 1282	4	605	1597	2	2062	1	2186	1								
* 1283	11	341	1308	6	1600	1	1601	2								
* 1284	10	468	1600	1	1601	2										
* 1285	10	468	1304	4	1600	1	1601	2								
* 1286	4	463	100	1	1602	1	1603	2								
* 1287	9	414	1404	6	1608	2	2188	1								
* 1288	8	608	1604	6	2157	1	2188	1								
* 1289	10	568	100	1	1604	6	1611	2	2188	1						
* 1290	10	678	1612	2												
* 1291	7	571	1613	4	1617	2	2190	1								
* 1292	6	563	1613	4	2160	1	2190	1								
* 1293	8	529	100	1	1613	4	1620	2	2190	1						
* 1294	9	608	100	1	1621	4	1623	2	1626	1						
* 1295	8	536	100	1	1621	4	1623	2	2158	1						
* 1296	7	589	100	1	1628	2	1630	2	1633	1						
* 1297	6	531	100	1	1630	2	1634	2	2161	1						
* 1298	8	539	100	2	1628	2	1629	2	1630	2						
* 1299	4	488	1639	2	2162	1	2164	1								
* 1300	4	503	100	1	2162	1	2164	1	2164	1						
* 1301	4	503	1645	1	2162	1	2191	1								
* 1302	6	503	100	1	1644	2	2148	2	2191	1						
* 1303	4	503	1550	1	2175	1	2176	1	2178	1						
* 1304	20	463	12	2	493	4	1503	6	1660	2	1661	1	1663	1		
* 1305	3	1673	1	2111	1	2210	1	2211	1							
* 1306	10	703	2163	1	2168	2	1670	1	1671	3	2098	1	2208	1		
* 1307	8	602	1661	1	1669	2	1670	1	1676	1	1677	1	2075	1		
* 1308	9	2209	1	104	1	142	2	1101	1	1676	1	1677	1	2075	1	
* 1309	6	2123	1	104	1	142	2	1084	1	1101	1	1235	1	1678	1	
* 1310	11	1679	1	2075	1											
* 1311	11	535	1085	1	1681	2	1683	2	2196	1						
* 1312	11	535	1085	1	1086	2	1661	1	1690	2	1691	2	1692	2		
* 1313	11	535	1085	1	1086	2	1661	1	1691	2	1691	2	1690	2		
* 1314	9	535	1085	1	1086	2	1690	2	1691	2	1691	2	1690	2		
* 1315	8	535	1085	1	1086	2	1691	2	1694	1						
* 1316	6	535	95	1	1084	2	1697	1	1697	1						
* 1317	6	535	100	2	666	2	667	2	1084	2	1085	1	1698	2		
* 1318	10	535	1084	2	1085	1	1700	2	1701	2						
* 1319	7	628	1084	2	1085	1	1700	2	1701	2						
* 1320	10	584	667	1	1082	2	1084	2	1234	1	1702	2	1703	2		
* 1321	10	641	667	1	1084	2	1235	2	1236	1	1702	2	1703	2		
* 1322	14	371	98	2	103	2	1304	4	1708	2	1710	2	1714	2		
* 1323	12	473	100	2	109	2	673	2	1084	2	1698	2	1710	2		
* 1324	10	503	100	1	109	2	673	1	1084	2	1698	2	1710	2		
* 1325	17	494	11	1	12	1	104	1	142	2	1101	1	1508	6		
* 1326	14	1708	1	1714	1	2075	1									
* 1327	14	503	98	2	103	2	1304	4	1708	2	1710	2	1714	2		
* 1328	13	503	98	2	103	2	1304	4	1708	2	1710	2	1714	2		
* 1329	14	544	100	1	1698	2	1717	2	1724	2						
* 1330	12	504	100	1	965	1	1731	2	1733	2						
* 1331	7	600	1679	1	965	1	1731	2	1733	2						
* 1332	6	628	1733	2	2074	1	2194	1								
* 1333	6	560	1736	2	2074	1	2197	1								
* 1334	6	569	1730	2	2074	1	2198	1								
* 1335	8	554	96	1	1697	2	1730	2	2074	3						
* 1336	8	548	100	1	1698	2	1730	2	2074	3						
* 1337	10	492	1071	1	1698	2	1730	2	2074	3						
* 1338	8	546	641	1	1730	2	1740	2	2074	3						

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 1340	22	318	98	2	103	2	1304	4	1308	8	1708	2	1710	2		
* 1341	18	1714	98	2	103	2	1304	8	1708	2	1710	2	1714	2		
* 1342	17	340	98	2	103	2	1303	3	1304	4	1708	2	1710	2		
		346														
* 1343	16	1714	98	2	103	2	1302	2	1304	4	1708	2	1710	2		
		353														
* 1344	13	489	11	1	12	1	104	1	142	2	1101	1	1304	4		
		1708	1714	1	2075	1										
* 1345	15	508	11	1	12	1	104	1	142	2	1101	1	1306	6		
		1708	1714	1	2075	1										
* 1353	6	470	454	1	1156	1	1727	2	1753	2						
* 1361	8	588	104	1	142	2	1082	1	1086	1	1101	1	1691	1		
		2075														
* 1362	8	613	104	1	142	2	1084	1	1101	1	1235	1	1760	1		
		2075														
* 1363	10	505	96	1	104	1	142	2	1084	1	1101	1	1235	1		
		1697	1761	1	2075	1										
* 1364	10	493	100	1	104	1	142	2	1084	1	1101	1	1235	1		
		1237	1698	1	2075	1										
* 1365	30	473	89	6	100	6	666	6	667	3	840	4	1084	1		
		1235	1237	1	1698	1	1702	1								
* 1366	10	543	100	2	666	2	667	1	1084	1	1235	1	1237	1		
		1698	1702	1												
* 1367	20	488	89	3	100	4	666	4	667	2	840	2	1084	1		
		1235	1237	1	1698	1	1702	1								
* 1368	11	643	667	1	1084	2	1235	2	1678	2	1702	2	1703	2		
* 1369	12	597	96	1	667	1	1084	2	1235	2	1702	2	1703	2		
		1761														
* 1370	12	583	100	1	667	1	1084	2	1235	2	1237	2	1702	2		
		1703														
* 1371	12	580	667	2	1084	2	1235	2	1702	2	1703	2	1762	2		
* 1372	10	467	104	1	142	2	1082	1	1086	1	1101	1	1763	1		
		1764	1765	1	2075	1										
* 1373	6	613	667	1	1084	2	1235	1	1702	1	1703	1	1762	1		
* 1374	10	535	104	1	142	2	667	1	1084	1	1101	1	1235	1		
		1703	1762	1	2075	1										
* 1375	19	334	13	2	98	4	99	1	103	2	1304	4	1708	2		
		1710	1714	2												
* 1376	14	553	454	2	1071	1	1766	8	1770	2	2192	1				
* 1377	10	689	1766	8	2078	1	2192	1								
* 1378	10	739	1772	8	2077	1	2192	1								
* 1379	12	686	100	1	1772	8	1775	2	2192	1						
* 1380	16	534	100	1	454	2	1071	1	1766	8	1770	2	1774	2		
* 1381	12	629	100	1	1766	8	1774	2	2078	1						
* 1382	12	644	100	1	1772	8	1774	2	2077	1						
* 1383	14	629	96	1	100	1	1772	8	1774	2	1777	2				
* 1384	14	633	100	2	1772	8	1774	2	1775	2						
* 1385	20	383	26	2	36	2	39	4	433	2	1085	1	1086	2		
		1403	1726	2	1727	2										
* 1386	12	403	26	2	1085	1	1086	2	1403	3	1726	2	1727	2		
* 1387	16	383	26	2	36	1	39	2	433	1	1085	1	1086	2		
		1403	1726	2	1727	2										
* 1388	4	663	1780	2	2168	2										
* 1389	3	524	1781	1	2030	2										
* 1390	3	461	60	1	72	2	1781	1	1783	1						
* 1391	7	422	72	2	1353	9	1781	1	1783	1						
* 1392	9	393	72	2	1355	9	1781	1	1783	1						
* 1393	11	368	72	2	1357	9	1781	1	1783	1						
* 1394	13	355	72	2	1359	9	1781	1	1783	1						
* 1395	15	351	72	2	1361	11	1781	1	1783	1						
* 1396	17	348	72	2	1363	13	1781	1	1783	1						
* 1397	19	348	72	2	1365	15	1781	1	1783	1						
* 1398	6	350	61	1	66	1	68	1	206	1	833	1				
* 1399	6	350	61	1	66	1	68	1	206	1	833	1				
* 1400	8	295	59	1	63	1	66	1	68	1	72	2	206	1		
		833														
* 1401	13	219	98	2	103	2	110	1	1308	8						
* 1402	7	245	10	2	103	2	110	1	797	2						
* 1404	21	249	10	2	26	2	165	1	421	4	452	1	467	4		
		468	469	2	874	1	884	2								

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs													
* 1405	23	228	10	2	26	4	421	4	452	2	467	4	468	2		
		469	2	1	884	2										
* 1406	26	216	10	2	26	4	421	4	452	2	467	4	468	2		
		469	2	1	884	2	1403	3								
* 1407	4	482	2117	3	2205	1										
* 1409	10	395	89	3	100	3	673	2	840	2						
* 1410	9	427	89	3	100	2	840	2	1113	2						
* 1411	10	455	89	3	100	2	840	2	1113	2	1531	1				
* 1412	12	348	100	1	673	1										
* 1414	13	478	14	2	15	2	1082	2	1234	1	1302	2	1690	1		
		1800	2	1801	1											
* 1415	13	463	14	2	15	2	1082	1	1234	1	1235	1	1302	2		
		1690	1	1803	2	1804	2									
* 1416	13	478	14	2	15	2	1235	2	1236	1	1302	2	1669	1		
		1803	2	1804	1											
* 1417	10	543	243	1	1019	2	1082	2	1234	1	1690	1	1800	2		
		1801	1													
* 1418	10	558	243	1	1019	2	1082	1	1234	1	1235	1	1690	1		
		1803	2	1804	1											
* 1419	10	578	243	1	1019	2	1235	2	1236	1	1669	1	1803	2		
		1804	1													
* 1420	10	563	104	2	142	1	1082	2	1234	1	1690	1	1800	2		
		1801	1													
* 1421	10	528	104	2	142	1	1082	1	1234	1	1235	1	1690	1		
		1803	2	1804	1											
* 1422	10	588	104	2	142	1	1235	2	1236	1	1669	1	1803	2		
		1804	1													
* 1423		523	2130	2	2131	1										
* 1424		507	100	1	1809	1	2130	2								
* 1425		503	641	4	1811	1	2130	2								
* 1426		503	89	4	1840	1	1812	2	1813	2	2080	1				
* 1427	11	521	484	4	781	1	1817	2	2079	2						
* 1428	9	556	1819	4	2079	1	2080	1								
* 1429	7	580	100	1	1824	1	1825	4	2127	2						
* 1430	13	477	60	2	71	2	72	4	1827	2	2079	2	2080	1		
* 1432	11	474	782	4	1543	1	1817	2	2079	2						
* 1433	9	556	100	1	1824	1	1829	4	2127	2						
* 1434	9	495	542	4	1827	1	2079	2	2080	1						
* 1435	7	600	1831	4	2079	1	2080	1								
* 1436	9	516	367	4	1817	1	2079	2	2080	1						
* 1437	7	483	100	1	1824	1	2128	4								
* 1438	9	478	383	4	1817	1	2079	2	2080	1						
* 1439	13	558	2080	1	2167	4										
* 1440	13	565	2171	2	2172	2	2173	1								
* 1441	13	576	2081	1	2126	4										
* 1442	13	441	14	2	109	1	178	2	1306	6	1824	2	2126	4		
* 1443	7	573	100	1	1824	1	2128	4								
* 1444	7	573	641	1	1844	1	2128	4								
* 1445	11	527	109	2	243	2	243	1	1824	2	2126	4				
* 1446	13	504	639	2	683	4	781	2	1817	2	2079	2	2080	1		
* 1447	7	441	100	1	673	2	1813	2	1845	2						
* 1448	9	417	1402	2	1846	4	1849	2	2080	1						
* 1449	9	438	1402	2	1849	2	1851	4	2081	1						
* 1450	13	418	109	2	110	1	1402	2	1824	2	1849	2	1851	4		
* 1451	15	436	109	2	242	2	243	1	1402	2	1824	2	1849	2		
		1851	4													
* 1452	15	441	87	2	109	2	147	1	1402	2	1824	2	1849	2		
		1851	4													
* 1453	11	426	100	1	1402	2	1824	2	1849	2	1851	4				
* 1454	8	453	165	1	1849	2	1851	4	2081	1						
* 1455	14	438	87	2	109	2	142	1	165	1	1824	2	1849	2		
		1851	4													
* 1456	13	477	970	6	1845	2	1855	2	2089	3						
* 1457	7	542	1857	1	1858	4										
* 1458	4	530	1860	4	2080	1	2199	1								
* 1459	4	530	1863	4	2081	1	2199	1								
* 1460	8	468	96	1	1863	4	1866	2	2199	1						
* 1461	8	493	100	1	1824	2	1863	4								
* 1462	6	483	100	1	1809	1	1867	1	2200	1						
* 1463	6	486	100	1	1809	1	1867	1	1871	1	1872	1	2174	1		

Table 5 (continued)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs									
* 1464	10	398	98	2	103	2	178	2	1873	2	1874	2
* 1465	12	338	14	2	98	2	103	2	178	2	1873	2
* 1466	14	333	13	2	14	2	98	2	103	2	178	2
* 1467	12	367	98	2	103	2	178	2	1302	2	1873	2
* 1468	14	348	98	2	103	2	178	2	1304	4	1873	2
* 1469	16	308	14	2	98	2	103	2	178	2	1304	4
* 1470	18	303	13	2	14	2	98	2	103	2	178	2
* 1471	13	328	60	1	72	2	98	2	103	2	178	2
* 1472	17	283	1914	1	72	2	98	2	103	2	178	2
* 1473	10	363	98	2	103	2	178	2	1874	2	1915	2
* 1474	14	313	98	2	103	2	178	2	1304	2	1874	2
* 1475	9	463	1914	1	1302	2	1915	2	1917	2	1915	2
* 1476	9	463	1914	1	1302	2	1915	2	1917	2	1915	2
* 1477	9	463	1914	1	1302	2	1915	2	1917	2	1915	2
* 1478	11	478	1916	2	1920	2	2133	2	1920	2	1920	2
* 1479	7	410	1916	2	1920	2	2133	2	1920	2	1920	2
* 1480	7	410	1916	2	1920	2	2133	2	1920	2	1920	2
* 1481	7	410	1916	2	1920	2	2133	2	1920	2	1920	2
* 1482	18	303	4	6	103	2	295	1	555	2	846	2
* 1483	18	348	4	6	103	2	846	2	1916	3	1933	2
* 1484	7	479	1082	1	1234	1	1920	1	1936	3	1937	1
* 1485	8	517	243	1	1019	1	1938	1	1939	2	1937	1
* 1486	6	555	142	1	1916	2	1940	2	1308	16	1876	2
* 1487	28	337	11	2	12	2	15	2	1308	16	1876	2
* 1488	12	376	11	2	12	2	15	2	1876	2	1941	2
* 1489	20	338	11	2	12	2	15	2	1304	8	1876	2
* 1490	6	398	11	1	12	1	15	1	1876	1	1941	1
* 1491	10	328	11	1	12	1	15	1	1304	4	1876	1
* 1492	7	383	11	1	15	1	44	1	523	1	1941	1
* 1493	12	331	11	1	12	1	15	1	1306	6	1876	1
* 1495	5	466	438	1	1945	2	1946	2	1948	1	98	1
* 1497	6	376	438	1	1004	2	1947	2	1948	1	98	1
* 1499	11	314	3	1	14	1	92	1	97	1	98	1
* 1500	10	323	1304	1	14	1	92	1	97	1	98	1
* 1501	9	313	1303	1	14	1	92	1	97	1	98	1
* 1502	4	465	1302	1	438	1	1949	2	92	1	97	1
* 1503	8	309	243	1	13	1	14	1	92	1	97	1
* 1504	10	466	96	1	1761	2	1950	2	1953	1	2048	2
* 1505	11	355	14	2	437	2	438	2	1306	6	1954	2
* 1506	10	451	96	1	1235	2	1761	2	1953	1	1954	2
* 1507	11	463	1235	2	1678	2	1956	2	1957	2	1955	2
* 1508	11	353	11	2	12	2	1304	4	1958	1	1959	2
* 1509	9	448	109	2	242	1	243	1	721	2	722	2
* 1510	9	448	109	2	242	1	243	1	721	2	722	2
* 1511	8	448	109	2	242	1	243	1	721	2	722	2
* 1512	8	448	109	2	242	1	243	1	721	2	722	2
* 1513	10	448	109	2	242	1	243	1	721	2	722	2
* 1514	4	465	13	1	1945	2	1946	2	1948	1	98	1
* 1515	3	466	1945	2	1946	2	1948	1	98	1	98	1
* 1516	10	361	1306	1	1947	2	1948	1	98	1	98	1
* 1517	9	340	104	2	142	1	1082	1	1969	2	1970	2
* 1518	6	503	1973	4	2084	1	2086	1	1969	2	1970	2
* 1519	6	518	1976	4	2085	1	2087	1	1969	2	1970	2
* 1520	6	513	1978	4	2084	1	2087	1	1969	2	1970	2

Table 5 (concluded)

PNo.	Ngroups	Tg	Group Numbers followed by their coefficients, in pairs															
* 1521	6	508	1977	4	2085	1	2086	1										
* 1522	4	552	96	1	1979	2	1980	1										
* 1523	4	561	100	1	1980	1	1981	1										
* 1524	10	503	1304	4	1982	NN	1983	NN	1984	2								
* 1525	4	508	100	1	1985	NN	1986	NN										
* 1526	4	499	96	1	1986	NN	1987	NN										
* 1527	10	458	1304	4	1988	NN	1989	NN	1990	2								
* 1528	7	293	1304	4	1988	NN	1991	1										
* 1529	3	398	1992	1	1993	NN												
* 1530	2	473	1992	1	1994	NN												
* 1531	14	448	89	3	96	1	840	2	1995	2	1998	2	1999	4				
* 1532	10	465	96	1	673	1	1995	NN	1998	2	1999	4						
* 1533	18	488	96	1	970	6	1998	NN	1999	4	2009	3	2202	2				
* 1534	11	457	96	1	1998	NN	1999	4	2003	1	2005	2	2203	1				
* 1535	12	430	89	3	840	NN	1995	NN	2008	4	2137	1						
* 1536	16	495	970	6	2008	NN	2009	NN	2137	1	2202	2						
* 1537	14	447	89	3	100	NN	840	NN	1995	2	1999	4	2010	2				
* 1538	9	467	2003	1	2005	1	2008	4	2137	1	2203	1						
* 1539	4	427	2008	2	2011	1	2113	1										
* 1540	4	376	1144	1	2013	NN												
* 1541	16	238	223	6	874	NN	2014	6	2015	1								
* 1542	20	198	223	6	874	NN	1143	6	1144	1								
* 1543	24	185	223	12	874	NN	1143	6	1144	1								
* 1544	12	457	89	3	109	NN	110	NN	640	2	1947	2	1948	1				
* 1545	10	447	109	2	110	NN	1668	NN	667	1	1947	2	1948	1				
* 1546	10	470	110	1	1947	NN	1948	NN										
* 1547	4	463	96	1	445	NN	1235	NN	1761	2	1947	2	1948	1				
* 1548	10	470	87	2	142	NN	1947	NN	1948	1								
* 1549	6	376	1071	1	1948	NN	2016	NN										
* 1550	4	454	87	2	92	NN	103	NN	1233	1	1900	2	2017	3				
* 1551	16	2018	87	2	92	NN	98	NN	105	2	2017	3	2018	2				
* 1552	15	413	87	2	92	NN	98	NN	105	2	2017	3	2018	2				
* 1553	13	469	12	2	1304	4	2017	3	2021	2	2022	2						
* 1554	2	633	1878	1	1879	1												
* 1555	10	410	72	2	109	NN	110	1	810	1	839	2	840	2				
* 1556	4	275	1909	1	1910	NN	1911	1										
* 1557	14	260	87	2	98	NN	103	NN	142	1	1307	7						
* 1558	11	530	87	2	109	NN	142	NN	1824	2	2126	4						
* 1559	8	315	103	2	1233	NN	1900	NN	1904	1	1905	3						
* 1560	7	282	14	1	102	NN	424	1	556	1	1303	3						
* 1561	24	353	26	2	36	NN	39	6	433	3	1085	1	1086	2				
* 1562	3	1403	1726	2	1727	NN	39	6	433	3	1006	2	1403	3				
* 1563	29	333	26	2	1727	NN	39	6	433	3	1403	6	1726	2				
* 1564	30	313	26	4	1726	NN	39	6	433	3	1403	6	1726	2				
* 1565	6	1727	1753	2	2024	NN	2											
* 1566	12	563	100	1	666	NN	1879	1	2049	2								
* 1567	4	206	10	2	26	NN	159	2	165	1	797	2	1403	3				
* 1568	18	195	36	1	39	NN	433	1										
* 1569	22	265	26	2	103	NN	242	2	243	1	433	2	1403	3				
* 1570	26	2054	2055	2	4	NN	39	2	103	2	242	2	243	1				
* 1571	9	252	26	2	36	NN	2055	4	103	2	242	2	243	1				
* 1572	11	433	1403	3	2054	NN	39	4	103	2	242	2	243	1				
		249	26	2	36	NN	2055	4	103	2	242	2	243	1				
		433	1403	3	2054	NN	242	2	243	1	797	2	1402	2				
		296	10	2	103	NN	242	2	243	1	797	2	1402	2				
		283	10	2	103	NN	242	2	243	1	797	2	1402	2				

Table 6
UNIQUE GROUPS IN POLYMERS

Polymer	Unique groups	Polymer	Unique groups	Polymer	Unique groups
44	903,340	394	2051,1043	531	49,50,51
83	619,1068	396	1041	532	88
99	776	397	1040	533	48,55,138
106	778,777	398	909,838	534	751
108	624	401	1039	535	84
128	829	402	1038	536	85
149	1149,355	403	1037	542	157
174	1366	404	1036	569	169
190	750	405	1035	571	171,173
199	137	406	1034	573	185
213	756	407	1033	578	1456
215	497	408	1032	579	187
218	995	413	1027	580	189
222	761	414	1025	581	190
225	1421	415	1023	582	193
226	792	417	1022,2050	583	194
227	784	418	1021	596	195
228	1321	419	910	602	207,205
246	1790	420	986	607	1154
247	94,101	421	993	613	403
248	996	424	1360	618	139
250	128	426	1017	622	304,891
252	839	430	1075	623	307
253	843	431	33	625	123,121
256	1245	445	1093,1094	631	2031
257	712	447	2044,1096	639	311
267	174	448	2043	660	300
269	1314	449	1098,1099	702	696,399
271	544	456	1110,1109	703	844
309	799	463	1112	708	405
311	455,930	467	1114	717	408
315	973,2042	469	1115,1116,1117	721	410
316	848	470	1119,1118	726	372,375,377
323	649,646	479	715	746	430,481,490
331	671,953,668	480	1120,1121,1122	759	439
333	1301	481	1150	760	441
335	678,682,959	482	820,1148	761	442
343	877,231	483	172	767	584
346	708	484	732	768	436
370	1069,2032	486	1197,2139	770	507
371	1060	489	2093,2144	771	509
372	1061	497	1136	799	461,460
373	6	500	1138	804	734,746
375	1065,1064	503	1139	806	1408
377	716	507	1141	812	470
379	1057,1056	516	113,114	825	525
380	1054	517	124,117	826	526
383	1053	519	1457	833	29
386	1074,1073	523	132,134	834	609
390	1047,1048	524	136,135,164	835	45
391	1045	525	140	841	266
392	1044	527	144,141,816	848	636

Table 6 (continued)

Polymer	Unique groups	Polymer	Unique groups	Polymer	Unique groups
852	1151	1074	255	1211	1297
856	588	1084	1161,1153	1215	1501
862	637	1095	992	1216	1502,1504
868	847	1096	989,990	1217	1506,1505
875	543	1097	991	1218	1507
879	573	1098	994,1046	1219	1508
880	575	1101	890,871	1221	1513
881	576,581	1102	131	1225	1523
893	590,591	1103	888	1233	1536
898	1312	1108	925,929,915,951,905	1236	1547
908	596,597	1120	1170	1239	1551
911	531,535	1124	1173	1241	1553
923	579,578	1142	1364	1244	1559,2148,2149,1558
926	563	1154	628	1246	2166
930	521,924	1155	1180,1181	1254	1574
931	226	11622	1190,2169	1258	1580
934	1152	1164	642,1196	1263	1581,1582
935	2212	1166	1202,1200,1201	1277	2152,1591
936	634	1168	730,1203	1278	1592,1593
939	629	1169	1205,1208	1282	1597,2186
940	644,647	1170	1204,1211,1213	1286	1602,1603
941	519	1171	1215,2179	1287	1608
942	589	1172	1220,1218,2206,	1288	2157
943	508,602	1173	2180	1289	1611
944	603	1174	2143,1225	1290	1612
945	607	1176	1229	1291	1617
946	612,608,610	1177	1231,1230	1292	2160
947	807,616	1179	1232	1293	1620
948	653	1183	1238,1239	1294	1626
949	153	1184	1240,1241	1295	2158
951	748	1187	1242,1243	1296	1633
952	492	1188	2145	1297	1634,2161
958	669	1189	1244	1298	1629
959	655,656	1190	1249	1299	1639
960	658,674,692	1191	1250,1251	1300	1642
963	709	1192	1255,1257,1254	1301	1645
964	477	1193	1258,1259	1302	1648
965	724	1194	1262,1260	1303	2176,2178,1650,2175
967	711	1195	1263	1304	1660,1663,2111,2210
968	725	1196	1265,1266	1305	2168
970	933	1197	1267,1268	1306	2098,1670,2208,2209
975	676	1198	1269	1307	1676,2123,1677
982	681	1199	1270	1309	1681,1683,2196
1038	1906	1200	1272,1271	1312	1692
1042	759	1201	1274,1273	1313	1661,1671
1047	770	1202	1276	1314	1693
1050	1000	1203	1277	1315	1694,1695
1051	621	1204	1279	1319	1700,1701
1054	793	1205	1281	1328	2193
1062	824	1206	1282	1329	1724,1723
1064	822	1207	1283	1330	1717,1721
1067	828	1208	1287,2146,2207	1333	1733
1068	826	1209	2187,1290,1292	1333	2194
1070	870	1210	1295	1334	1736,2197

Table 6 (concluded)

Polymer	Unique groups	Polymer	Unique groups	Polymer	Unique groups
1335	2198	1457	1857,1858,1859	1518	1973
1338	1738	1458	1860	1519	1976
1339	1740	1460	1866	1520	1978
1361	1691	1462	2200	1521	1977
1362	1760	1463	1871,2174,1872	1522	1979
1372	1765,1764,1763	1475	1917	1523	1981
1383	1777	1476	1919,1918	1524	1983,1984,1982
1388	2165,1780	1477	1920	1525	1985
1389	2030	1479	1926,1925	1526	1987
1397	1365	1480	1928,1927	1527	1989,1990
1407	2117	1481	1930,1929	1528	1991
1423	2131	1482	1933	1529	1993
1424	1809,2130	1483	2046,2047	1530	1994
1425	1811	1484	1937,1936	1537	2010
1426	1812	1485	1938,1939	1539	2113,2011
1428	1819	1486	1940	1540	2013
1429	1825	1492	523,1944	1541	2015,2014
1433	1829	1495	1946,1945	1550	2016
1435	1831	1502	1949	1553	2022,2021
1437	2128	1504	2052,1950,2048	1554	1878
1439	2167	1506	1954,1955	1555	810
1440	2171,2172,2173	1507	1957,1956	1557	1911,1909,1910
1444	1844	1508	1959,1958	1564	2024
1447	1845,1813	1513	1962,1963,2201	1565	2049
1448	1846	1516	1968,1967	1566	159
1456	1855	1517	1970,1969		

Table 7

NUMBER OF POLYMERS CONTAINING EACH GROUP IN THE POLYMER SET

Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol	Grno	Npol
14	4.	15	12.	16	3.	17	25.	18	10.	19	68.	20	11.	21	51.	22	13.
36	60.	37	17.	38	3.	39	29.	40	26.	41	28.	42	5.	43	29.	44	1.
50	9.	51	9.	52	43.	53	2.	54	45.	55	1.	56	46.	57	48.	58	1.
61	8.	62	34.	63	24.	64	66.	65	30.	66	16.	67	71.	68	12.	69	120.
80	84.	81	1.	82	85.	83	1.	84	88.	85	1.	86	89.	87	90.	88	176.
93	3.	94	1.	95	3.	96	20.	97	38.	98	38.	99	98.	100	48.	101	100.
101	102.	102	19.	103	138.	104	104.	105	14.	106	107.	107	4.	108	3.	109	3.
110	31.	111	1.	112	1.	113	115.	114	8.	115	117.	116	2.	117	121.	118	1.
123	1.	124	1.	125	2.	126	126.	127	2.	128	128.	129	1.	130	129.	131	1.
131	1.	132	1.	133	1.	134	135.	135	1.	136	137.	137	1.	138	138.	139	1.
140	1.	141	1.	142	38.	143	144.	144	1.	145	148.	146	1.	147	157.	148	1.
162	21.	163	8.	164	1.	165	57.	166	10.	167	169.	168	51.	169	171.	170	1.
173	1.	174	1.	175	22.	176	4.	177	5.	178	178.	179	51.	180	179.	181	1.
181	32.	182	26.	183	2.	184	185.	185	1.	186	187.	187	1.	188	190.	189	1.
193	1.	194	1.	195	1.	196	197.	197	7.	198	203.	199	1.	200	206.	201	1.
227	17.	228	1.	229	8.	230	11.	231	1.	232	3.	233	1.	234	17.	235	1.
243	8.	244	3.	245	37.	246	40.	247	11.	248	2.	249	1.	250	2.	251	1.
256	2.	257	2.	258	2.	259	4.	260	4.	261	1.	262	1.	263	1.	264	1.
311	2.	312	2.	313	2.	314	4.	315	5.	316	4.	317	13.	318	1.	319	1.
340	1.	341	4.	342	1.	343	1.	344	1.	345	1.	346	13.	347	1.	348	1.
382	1.	383	4.	384	4.	385	4.	386	8.	387	8.	388	6.	389	7.	390	1.
400	2.	401	1.	402	1.	403	1.	404	1.	405	1.	406	3.	407	2.	408	17.
422	2.	423	1.	424	9.	425	1.	426	1.	427	5.	428	16.	429	4.	430	1.
437	5.	438	10.	439	1.	440	1.	441	1.	442	1.	443	3.	444	2.	445	21.
454	16.	455	1.	456	9.	457	66.	458	9.	459	1.	460	1.	461	30.	462	13.
468	17.	469	12.	470	3.	471	9.	472	1.	473	13.	474	1.	475	2.	476	1.
492	1.	493	2.	494	3.	495	1.	496	1.	497	1.	498	1.	499	1.	500	1.
519	1.	520	1.	521	1.	522	1.	523	1.	524	1.	525	1.	526	6.	527	1.
534	1.	535	14.	536	1.	537	1.	538	1.	539	1.	540	1.	541	1.	542	1.
545	20.	546	25.	547	1.	548	1.	549	1.	550	1.	551	18.	552	1.	553	1.
557	1.	558	1.	559	1.	560	1.	561	1.	562	1.	563	1.	564	1.	565	1.
599	1.	600	1.	601	1.	602	1.	603	1.	604	1.	605	1.	606	1.	607	1.
608	1.	609	1.	610	1.	611	1.	612	1.	613	52.	614	39.	615	1.	616	1.
621	1.	622	3.	623	1.	624	7.	625	2.	626	2.	627	1.	628	1.	629	1.
631	2.	632	3.	633	1.	634	1.	635	1.	636	1.	637	22.	638	19.	639	2.
641	2.	642	1.	643	2.	644	1.	645	1.	646	47.	647	1.	648	1.	649	1.
651	3.	652	1.	653	5.	654	2.	655	2.	656	2.	657	2.	658	1.	659	1.
663	15.	664	1.	665	2.	666	28.	667	36.	668	36.	669	1.	670	1.	671	1.
673	8.	674	1.	675	2.	676	1.	677	1.	678	1.	679	4.	680	23.	681	1.
683	9.	684	5.	685	2.	686	12.	687	4.	688	12.	689	4.	690	1.	691	1.
693	23.	694	2.	695	2.	696	10.	697	10.	698	10.	699	2.	700	2.	701	3.
707	2.	708	1.	709	1.	710	1.	711	1.	712	1.	713	2.	714	2.	715	1.
718	2.	719	2.	720	2.	721	1.	722	1.	723	1.	724	4.	725	1.	726	1.
732	1.	733	7.	734	1.	735	1.	736	2.	737	2.	738	10.	739	10.	740	1.
745	2.	746	1.	747	3.	748	14.	749	1.	750	1.	751	3.	752	7.	753	1.
759	1.	760	1.	761	1.	762	1.	763	1.	764	1.	765	9.	766	2.	767	1.
778	1.	779	1.	780	1.	781	1.	782	1.	783	1.	784	4.	785	5.	786	1.
791	5.	792	7.	793	1.	794	1.	795	1.	796	1.	797	1.	798	1.	799	1.
800	2.	801	4.	802	2.	803	2.	804	1.	805	44.	806	1.	807	2.	808	1.
817	3.	818	1.	819	1.	820	1.	821	1.	822	4.	823	1.	824	1.	825	1.
827	3.	828	4.	829	1.	830	5.	831	5.	832	22.	833	1.	834	1.	835	49.
841	6.	842	3.	843	1.	844	1.	845	1.	846	10.	847	2.	848	1.	849	2.
851	12.	852	5.	853	5.	854	5.	855	4.	856	10.	857	1.	858	1.	859	1.
884	17.	885	1.	886	1.	887	1.	888	1.	889	1.	890	4.	891	1.	892	1.
910	1.	911	1.	912	1.	913	1.	914	1.	915	1.	916	1.	917	1.	918	1.
922	2.	923	5.	924	1.	925	2.	926	1.	927	8.	928	2.	929	8.	930	1.
952	9.	953	1.	954	13.	955	1.	956	1.	957	8.	958	6.	959	1.	960	1.
975	2.	976	1.	977	1.	978	1.	979	1.	980	1.	981	1.	982	1.	983	1.
989	1.	990	1.	991	12.	992	2.	993	2.	994	14.	995	12.	996	1.	997	1.
997	2.	998	2.	999	2.	1000	2.	1001	4.	1002	12.	1003	5.	1004	1.	1005	1.
1012	9.	1013	1.	1014	1.	1015	1.	1016	1.	1017	1.	1018	1.	1019	1.	1020	1.
1024	1.	1025	1.	1026	1.	1027	1.	1028	1.	1029	1.	1030	1.	1031	1.	1032	1.
1034	2.	1035	1.	1036	1.	1037	1.	1038	1.	1039	1.	1040	1.	1041	1.	1042	1.
1043	1.	1044	1.	1045	1.	1046	1.	1047	1.	1048	1.	1049	1.	1050	1.	1051	1.
1051	1.	1052	1.	1053	1.	1054	1.	1055	1.	1056	1.	1057	1.	1058	1.	1059	1.
1061	1.	1062	2.	1063	4.	1064	1.	1065	1.	1066	1.	1067	2.	1068	1.	1069	2.

Table 9

DISTRIBUTION OF TGS WITHIN THE DATA SET

Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo	Tg	Npo
120	1.	146	1.	153	1.	155	1.	163	2.	167	1.	171	1.	173	2.	175	1.	177	1.
179	1.	180	2.	183	1.	185	2.	187	3.	188	7.	189	1.	190	3.	191	3.	193	4.
194	2.	195	5.	196	1.	197	3.	198	9.	199	2.	200	3.	201	5.	202	5.	203	9.
204	4.	205	4.	206	4.	207	4.	208	5.	210	3.	211	4.	212	2.	213	8.	214	4.
215	10.	216	8.	217	1.	218	10.	219	3.	220	7.	221	10.	222	1.	223	11.	224	4.
225	4.	226	5.	227	2.	228	14.	229	3.	230	2.	231	10.	232	3.	233	11.	234	2.
235	10.	236	7.	237	5.	238	7.	239	8.	240	2.	241	5.	242	1.	243	6.	244	6.
245	9.	246	7.	247	2.	248	9.	249	6.	250	5.	251	8.	252	2.	253	8.	254	5.
255	4.	256	3.	257	4.	258	12.	259	3.	260	6.	261	1.	262	3.	263	15.	264	4.
265	7.	266	3.	267	4.	268	5.	269	2.	270	8.	271	2.	272	4.	273	1.	274	1.
275	2.	276	2.	277	2.	278	2.	279	4.	280	3.	281	2.	282	2.	283	12.	284	3.
288	1.	289	1.	290	1.	291	2.	292	3.	293	10.	295	4.	296	3.	297	1.	298	6.
299	2.	300	3.	301	1.	302	2.	303	8.	304	2.	305	3.	306	2.	307	1.	308	3.
309	2.	310	2.	311	2.	312	1.	313	5.	314	4.	315	3.	316	1.	317	2.	318	4.
319	5.	320	3.	321	1.	322	2.	323	6.	324	3.	325	6.	326	4.	327	5.	328	2.
329	3.	330	1.	331	3.	332	2.	333	9.	334	4.	335	4.	337	2.	338	7.	339	7.
340	6.	341	1.	342	2.	343	4.	344	2.	345	3.	346	1.	347	2.	348	8.	349	5.
350	1.	351	3.	353	7.	354	2.	355	3.	356	3.	357	2.	358	4.	359	2.	360	2.
361	1.	363	4.	364	1.	365	4.	366	1.	367	3.	368	5.	371	3.	372	1.	373	3.
374	3.	375	3.	376	5.	378	2.	379	2.	380	3.	381	5.	383	8.	385	2.	386	2.
388	4.	389	2.	390	2.	391	2.	393	5.	394	4.	395	4.	396	1.	397	1.	398	6.
399	1.	400	2.	401	2.	403	5.	404	1.	405	2.	406	1.	407	2.	408	3.	410	2.
411	1.	413	4.	417	2.	418	4.	420	3.	422	3.	423	3.	425	2.	426	2.	427	2.
428	5.	430	1.	433	2.	436	3.	438	5.	439	1.	441	4.	446	1.	447	3.	448	7.
449	2.	450	2.	451	1.	453	7.	454	1.	455	1.	457	4.	458	1.	459	1.	461	2.
462	1.	463	9.	465	2.	466	2.	467	2.	468	3.	469	2.	470	3.	473	6.	474	1.
475	1.	477	4.	478	11.	479	2.	482	1.	483	4.	486	2.	487	1.	488	4.	489	1.
490	2.	491	1.	492	1.	493	2.	494	2.	495	4.	498	1.	499	1.	501	3.	502	1.
503	10.	504	2.	505	1.	507	2.	508	4.	510	2.	511	2.	513	5.	516	1.	517	1.
518	1.	521	1.	522	1.	523	4.	524	1.	526	1.	527	2.	528	2.	529	1.	530	2.
531	2.	533	4.	534	1.	535	1.	536	2.	537	1.	538	1.	539	2.	541	1.	542	1.
543	3.	544	1.	545	3.	546	1.	547	1.	548	3.	550	1.	551	3.	552	3.	553	4.
554	1.	556	1.	558	2.	559	1.	560	1.	561	3.	562	1.	563	6.	565	3.	567	2.
568	3.	569	1.	571	3.	576	2.	578	1.	580	2.	581	2.	583	2.	584	1.	588	3.
589	3.	590	1.	591	1.	593	2.	595	1.	597	1.	598	1.	600	2.	602	1.	603	3.
605	2.	608	2.	613	5.	614	1.	616	1.	618	1.	623	2.	625	1.	628	3.	629	2.
633	2.	638	2.	639	1.	641	1.	642	1.	643	2.	644	1.	646	1.	653	1.	655	2.
658	1.	659	1.	663	2.	669	1.	677	1.	678	1.	683	1.	686	1.	689	1.	695	1.
703	1.	739	1.																

Numbers of polymer Tgs in temperature bands

Tg band	Npo	Tg band	Npo	Tg band	Npo	Tg band	Npo	Tg band	Npo
100/201	64.	200/301	463.	300/401	285.	400/501	174.	500/601	142.
600/701	49.	700/801	2.						

REFERENCES

<u>No.</u>	<u>Author</u>	<u>Title, etc</u>
1	W.A. Lee	The importance and significance of the glass transition temperatures of polymers. RAE Technical Memorandum Mat 1050 (1983)
2	P.M. Rabley	Private communication
3	D.E. Lloyd	Private communication
4	W.A. Lee	Calculation of the glass transition temperatures of linear polymers. Part I. Rules for hierarchical ordering of the data set. RAE Technical Report 84109 (1984)
5	W.A. Lee R.A. Rutherford (RAPRA*)	RAPRA Data Handbook: Polymer transition temperature data sheets. RAPRA, Shawbury (1974)
6	J.M. Barton W.A. Lee D. O'Mahoney	Correlation of the glass transition temperatures of polyacrylates, polymethacrylates, and polychloroacrylates with their chemical structures. RAE Technical Report 67298 (1967)
7	W.A. Lee Shirley A. Watts	Correlation of the glass transition temperatures of carbon-chain fluoropolymers with their chemical structures. RAE Technical Report 74060 (1974)

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17. Abstract A large data set of 1197 polymers, with corresponding glass transition temperatures, is tabulated both in the form of chemical structures and in numerical form suitable for computer analysis. Polymers have been analysed into groups with invariant nearest neighbours and where a particular group is found in only one polymer, it has been identified. An unambiguous and easily assimilated method of analysing and classifying polymer structures into combinations of groups is illustrated which could be more widely adopted with much advantage. It is suggested that the polymer data set, with appropriate modifications and improvements, should be used as a standard set for the evaluation of Tg relationships.			