

UNCLASSIFIED

AD NUMBER
AD401001
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information; 17 APR 1961. Other requests shall be referred to US Library of Congress, Attn: Aerospace Technology Division, Washington, DC.
AUTHORITY
ATD ltr, 2 Dec 1965

THIS PAGE IS UNCLASSIFIED

401001

ASTIA FILE COPY

S/251/62/029/005/003/003
D287/D307

STEP

AUTHORS: (8) (Areshidze, Kh.I. (Corresponding Member of the AS Georgian SSSR) and Charkviani, T.N.)
TITLE: (6) Preparation of C₂-C₄ olefin monomers by the thermal decomposition of n-pentadecane
PERIODICAL: (15) Akademiya nauk Gruzinskoy SSSR. Soobshcheniya, v.29, no. 5, 1962, 533-538

TEXT: The present paper was submitted during the 12th All-Union Conference on High-molecular Weight Substances (Section on Monomers), April 4, 1962. C₂-C₄ olefin monomers can be prepared by thermal and catalytic decomposition of C₆ and higher alkanes. In the present experiments, up to 76% of C₂-C₄ olefins were obtained by pyrolysis of n-pentadecane, at temperatures between 540 and 780°C. The experiments were carried out in silica tubes, the reaction temperature being controlled by means of the device ЛАТР-1 (LATR-1) and measured with a Ni-constantan thermocouple. Steam was used in some investigations, the volume velocity varied between 0.03 and
Card 1/2

Preparation of C₂-C₄ olefin...

S/251/62/029/005/003/003
D287/D307

1.6. The separated gas was analyzed in a gas analyzer БТМ-2 (VTI-2) and both bound and free oxygen was determined. Maximum yields of C₂-C₄ alkanes were obtained at 720°C, in the presence of steam, with volume velocities of 0.2. There are 2 tables.

ASSOCIATION: Akademiya nauk Gruzinskoy SSR, Institut khimii im. P.G. Melikishvili, Tbilisi (Academy of Sciences of the Georgian SSR, Institute of Chemistry im. P.G. Melikishvili, Tbilisi)

SUBMITTED: April 17, 1961

Card 2/2