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Abstract

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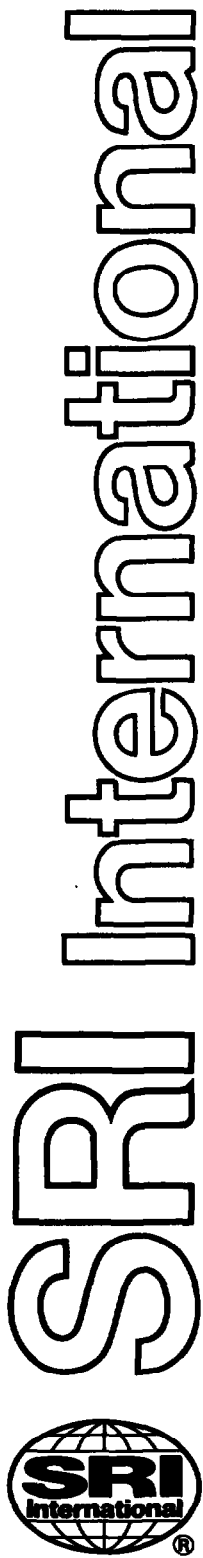
THERMOPLASTIC POLYESTERS

(January 1987)

This report presents modern processes and manufacturing costs for polyethylene terephthalate (PET) and polybutylene terephthalate (PBT), and the costs for converting these materials into special grades of resins, specifically, the engineering resin grades for both PET and PBT, and bottle-grade (IV = 0.72) and "specialty" resin grade (IV 1.04) PET.

Another important feature in this report is the evaluation of a new route to 1,4-butanediol (1,4-BD), currently under development by Union Carbide, but based on the initial work done by Davy McKee. Recently, the process was also licensed to Standard Oil Company (Cleveland). For comparison, we present updated costs for the conventional route to 1,4-BD, the acetylene/formaldehyde route.

This report summarizes many of the patents on PET, PBT, and 1,4-BD manufacture (and related subjects) that have been granted since our last major reports on PET (18A, January 1972) and PBT/1,4-BD (96A, November 1977). Also included is a section on the industry status of PET, PBT, and 1,4-BD, and a section on the basic chemistry of the evaluated processes.



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THERMOPLASTIC POLYESTERS

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For detailed marketing data and information, the reader is referred to one of the SRI programs specializing in marketing research. The CHEMICAL ECONOMICS HANDBOOK Program covers most major chemicals and chemical products produced in the United States and the WORLD PETROCHEMICALS Program covers major hydrocarbons and their derivatives on a worldwide basis. In addition, the SRI DIRECTORY OF CHEMICAL PRODUCERS services provide detailed lists of chemical producers by company, product, and plant for the United States and Western Europe.

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