

ABSTRACT
Process Economics Program Report 9D
TEREPHTHALIC ACID AND DIMETHYL TEREPHTHALATE
(November 1990)

This study presents designs and economics for the production of terephthalic acid (TPA) and dimethyl terephthalate (DMT) from processes that are of current industry importance. No new processes have been commercialized since our last report was issued in 1976; however the processes presented here are updated from those presented in previous reports to reflect current technology.

Most of the TPA currently produced is made by oxidation of *p*-xylene in a process similar to the one presented, while the bulk of the DMT produced commercially is made by a process using successive oxidations and esterifications such as the one we have evaluated.

In addition, the report includes the present status of the TPA and DMT industries, with a list of estimated plant capacities, and a discussion of the chemistry entailed in the various manufacturing processes. Patents issued on TPA and DMT since our 1976 update on the subject, PEP Report 9C, are also discussed.

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