Abstract

Process Economics Program Report No. 202
MONOMERS FOR HIGH-PERFORMANCE POLYMERS
(April 1991)

This report evaluates the manufacturing processes for four monomers that are used primarily to make liquid crystal polymers and polyethylene naphthalate: dimethyl-2,6-naphthalenedicarboxylate, p-hydroxybenzoic acid, 6-hydroxy-2-naphthoic acid, and 4,4i-dihydroxydiphenyl. The report contains preliminary process designs and cost estimates for manufacturing these monomers in a dedicated facility, and a process design and cost estimates for manufacturing three of them in a multiproduct shared facility.

This report includes summaries of pertinent patents for the four monomers mentioned above. Sections on the status of the industry and issues related to multiproduct manufacturing are also provided.
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