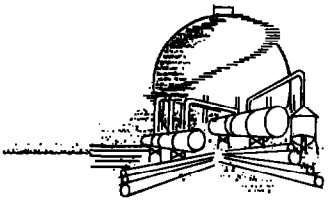

PROCESS ECONOMICS PROGRAM

SRI INTERNATIONAL
Menlo Park, California
94025

Abstract

Process Economics Program Report No. 22C

PHENOL

(March 1991)

This is the fourth in a series of reports on the manufacture of phenol. The report contains preliminary process designs and cost estimates for the cumene peroxidation process, the toluene oxidation process, and a conceptual process based on a Mitsui Petrochemicals patent that entails partially hydrogenating benzene to cyclohexene, reacting the cyclohexene with water to form cyclohexanol, and dehydrogenating the cyclohexanol to produce phenol. In addition, this report includes a discussion of research developments since the last PEP report was written (1977), a discussion of the basic chemistry of the manufacturing processes, and a discussion of the industry status.

SRI International

Report No. 22C

PHENOL

SUPPLEMENT C

by MARTHA K. GUERRA

March 1991

A private report by the

PROCESS ECONOMICS PROGRAM

Menlo Park, California 94025

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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