



# PROCESS ECONOMICS PROGRAM

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## Abstract

Process Economics Program Report No. 21C

OXO ALCOHOLS

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This report supplement reviews the technology in the manufacture of n-butanol, 2-ethylhexanol, isodecyl alcohol, and C<sub>12</sub>-C<sub>15</sub> mixed alcohols by the oxo process. Butanol is used as a solvent for surface coatings and 2-ethylhexanol and isodecyl alcohol are precursors for plasticizers. The C<sub>12</sub>-C<sub>15</sub> alcohols are used primarily in detergents.

The rhodium/phosphine catalysts commercialized by Union Carbide and Ruhrchemie and the cobalt/phosphine catalyst used by Shell are considered in the processes for the production of n-butanol and 2-ethylhexanol from propylene. For the processes making higher alcohols from higher olefins, a cobalt hydrocarbonyl catalyst and a cobalt/phosphine catalyst are considered.

Report No. 21C

# **OXO ALCOHOLS**

**SUPPLEMENT C**

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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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