

400,000 TPY CUMENE PLANT FOR SALE

Capacity:

Nominal: 396,000 TPY
Maximum: 420,000 TPY

Product Purity:

99.75%

Feedstock:

Benzene
Propylene

Consumption Ratio

Benzene : Propylene : Cumene
0.662 : 0.367 : 1

Major Equipment

Benzene accumulator
Benzene purification column
Preheaters
Water / Propane separator
Condensators
Reactors



BRIEF PROCESS DESCRIPTION

This complete cumene plant is based on zeolite-based liquid-phase process. Cumene is made by the alkylation of benzene with propylene, which yields a mixture of alkylated and polyalkylated benzenes. Excess benzene is used so propylene reacts completely. Propylene is injected before each catalyst bed to improve catalyst selectivity and enhance its activity and stability. The mixture of alkylated and polyalkylated benzenes is sent to a distillation train that consists of a benzene column, cumene column and polyisopropylbenzene (PIPB) column. The polyalkylated benzenes recovered in the PIPB column are transalkylated with benzene to produce additional cumene for maximum cumene yield. The alkylation and transalkylation effluents are fed to the benzene column, where the excess benzene is taken as the overhead product for recycle to the reactors.

CONTACT US FOR MORE DETAILS

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