UOP TM-100 TOLUENE METHYLATION CATALYST

The UOP Toluene Methylation process selectively methylates toluene to xylenes using methanol as an additional feed source. The process is para-selective, with the product having a para-xylene concentration in the xylene fraction of over 90%. TM-100 is the UOP catalyst used in this process.



PROCESS CHEMISTRY

The methylation of toluene to xylenes proceeds via a bi-molecular alkylation reaction between toluene and methanol. Selected process conditions, together with TM-100 catalyst and proprietary fast fluidized bed reactor technology optimize toluene conversion and methanol utilization, while minimizing competing methanol to olefin side reactions. TM-100's pore structure and selectively modified acidity allows easy diffusion of toluene and para-xylene while inhibiting the diffusion of ortho-xylene and meta-xylene.

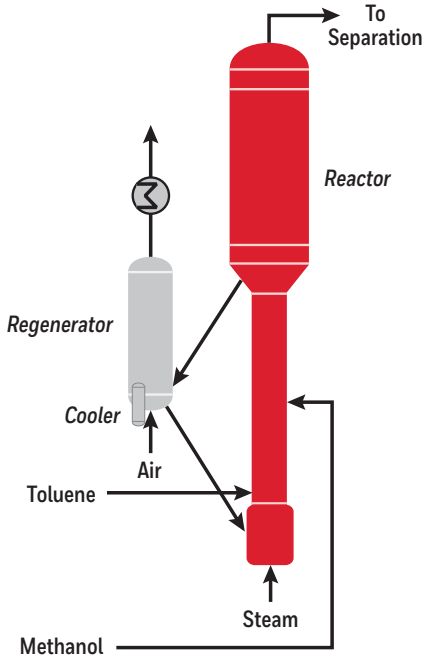
EXPERIENCE

TM-100 catalyst has been produced in trial quantities and is ready for the first commercial application.

PACKAGING

- 55 gal US Drums
- Net weight per drum = 100 kg/drum
- Supersacks available upon request

UOP Toluene Methylation Process



FEATURES AND BENEFITS

Used in the UOP Toluene Methylation Process to produce mixed xylenes having para-xylene content significantly above equilibrium values

- Outstanding yields and performance
- Harnesses UOP's unique experience with fluidized bed reactor technology utilised in FCC and MTO processes and a proprietary highly active and stable catalyst system

For more information
www.uop.com

UOP LLC, A Honeywell Company
25 East Algonquin Road
Des Plaines, IL 60017-5017, U.S.A.
www.uop.com

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