Honeywell | UOP Catalysts

UOP AF-100 Catalyst

Saturation of diolefins and vinyl aromatics

Description

AF-100 is used for the saturation of diolefins and vinyl aromatics typically found in Pygas. The stable effluent product can now be easily routed to downstream units with considerably reduced risk of polymerization and exchanger fouling. AF-100 catalyst is based on a proprietary formulation developed by UOP.



Offers improved selectivity and longer cycle lengths than prior catalyst generations.

Applications

AF-100 catalyst is used in the first stage of the UOP Pygas Hydrotreating Process for production of hydrotreated Pygas. The improved hydrogenation selectivity of diolefins to olefins, but not saturates, allows for better reactor temperature control leading to longer cycle length. The first stage is normally followed by second stage Pygas hydrotreating where the remaining olefins are saturated and hydrodesulfurization, and denitrogenation reactions take place. The catalysts and process are optimized resulting in minimal aromatic saturation. The now stable Pygas product could be routed to variety of downstream processes including Sulfolane for the extraction and recovery of aromatics to the aromatics complex.

Experience

AF-100 catalyst was commercialized in 2014 and is a more optimized version of UOP's long history of earlier generation Pygas hydrotreating catalyst PF-4.

Typical physical properties (nominal)

Particle Shape	Sphere
Nominal diameter, mm	1.6
Sock loaded ABD, kg/m^3	550
Metals	Palladium

Packaging

- 55 U.S. gallon (210 liter) steel drums
- Net weight per drum of 115 kilograms

Safe Handling and Disposal

To ensure safe handling and disposal of this material, refer to the AF-100 MSDS, the Operating Manual or contact your UOP technical representative.

For more information

www.uop.com

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UOP4507-65 May 2016