



UOP SelectFining™ S-200 Catalyst

Refining Catalyst

Description

S-200 catalyst was developed for the UOP SelectFining process to allow refiners to selectively reduce the sulfur content in catalytically or thermally cracked naphtha streams. In the presence of hydrogen, it converts organic sulfur into hydrogen sulfide and minimizes octane loss by controlling saturation of the feedstock's olefinic components.

Applications

The S-200 catalyst is formulated to selectively reduce the concentration of sulfur compounds from naphtha-range hydrocarbon streams, including naphtha derived from Fluid Catalytic Cracking (FCC) process units. These streams may contain significant amounts of sulfur and olefinic compounds, which when hydrotreated by conventional means, can result in excessive octane loss. S-200 catalyst minimizes octane loss during hydrotreating by converting sulfur compounds while minimizing the saturation of olefins. Because the catalyst was developed for the UOP SelectFining process, which operates in conventional naphtha hydrotreating process conditions, it is well suited for reload applications of other naphtha desulfurization processes.

Features and benefits

- S-200 catalyst is capable of converting over 99 weight percent of sulfur compounds and attaining product sulfur levels as low as 10 wppm.
- Product octane is dependent upon the types of sulfur components present in the feedstock and the desired degree of desulfurization. Relative to the feedstock octane, losses of as low as 0.5 octane number have been demonstrated.

- The catalyst's high activity and stability, which is achieved by optimizing pore structure and metals on catalyst, results in extended operating cycles.
- The catalyst size and shape result in less than half of the pressure drop compared to competing products.

Experience

The SelectFining S-200 catalyst became commercially available in 2005.

Physical properties

Nominal Size	1/8" (3 mm)
Shape	Trilobed extrudate
Length	5 mm
ABD	
Dense	37.8 lb/ft ³ (606 kg/m ³)
Sock	32.9 lb/ft ³ (527 kg/m ³)
Metals	Cobalt and molybdenum

Packaging

Available in steel drums and flexible bulk containers.

For more information

For more information, contact your local UOP representative or our Des Plaines sales office:

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