Honeywell | UOP Catalysts

UOP PI-242 Par-Isom™ Catalyst

Sulfated Zirconia C_5-C_6 isomerization catalyst for upgrading naphtha

Description

The PI-242 Par-Isom catalyst is an amorphous, sulfated zirconia catalyst containing platinum that is used to produce high octane C_5-C_6 isomerate typically used for blending into the gasoline pool. The PI-242 Par-Isom catalyst is also fully regenerable.

Application

The PI-242 Par-Isom catalyst is optimized for use in the UOP Par-Isom process and is particularly suited for feedstocks that contain a high concentration of benzene and C_6^+ cyclic hydrocarbons. The catalyst selectively converts pentane, and hexane to higher octane branched hydrocarbons. In addition to isomerization of paraffins, the PI-242 Par-Isom catalyst saturates benzene. The catalyst is designed to operate over a wide range of reaction conditions and feedstocks to maximize isomerization and minimize hydrocracking.

Experience

The PI-242 Par-Isom catalyst was introduced in 2003 and today has more than 10 sales. The PI-242 Par-Isom catalyst operates in both revamped units using existing equipment as well as grass-root designs and construction.

Physical Properties

ABD (sock), lb/ft³ (kg/m³)	90.0 (1442)
Nominal diameter, inch (mm)	1/16 (1.6)
Shape	Cylindrical
Metals	Platinum

Safe Handling and Disposal

The handling, storage, transportation and disposal of the PI-242 Par-Isom catalyst is subject to governmental regulation, and you must manage it safely and in accordance with all applicable requirements.



UOP's PI-242 Par-Isom catalyst has excellent activity and selectivity for optimal octane-barrel production of isomerate. The PI-242 Par-Isom catalyst has superior resistance to water and other contaminants without the need for driers to protect the catalyst.

Packaging

- 55 U.S. gallon (210 liter) steel drums
- Net weight per drum 170 kilograms

FEATURES & BENEFITS

- High isomerate octane number
- Can achieve complete benzene saturation for typical feeds
- Volumetric yields can typically exceed 99 LV-%
- For feeds with lower benzene and C_6+ cylic hydrocarbon content, UOP's PI-244 Par-Isom catalyst (lower platinum content compared to PI-242) should be considered

For more information
www.uop.com

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