

UOP PI-244 Par-Isom™ Catalyst

Sulfated Zirconia C₅-C₆ isomerization catalyst for upgrading naphtha

UOP's PI-244 Par-Isom catalyst has excellent activity and selectivity for optimal octane-barrel production of isomerate. The PI-244 Par-Isom catalyst has superior resistance to water and other contaminants without the need for driers to protect the catalyst.



Description

The PI-244 Par-Isom catalyst is an amorphous, sulfated zirconia catalyst containing platinum that is used to produce high octane C₅-C₆ isomerate typically used for blending into the gasoline pool. The PI-244 Par-Isom catalyst is also fully regenerable.

Application

The PI-244 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 C₆⁺ cyclic hydrocarbons. The catalyst selectively converts pentane, and hexane to higher octane branched hydrocarbons. In addition to isomerization of paraffins, the PI-244 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.

Features and benefits

- High isomerate octane number
- Can achieve complete benzene saturation for typical feeds
- Volumetric yields can typically exceed 99 LV-%
- For feeds with higher benzene and C₆⁺ cyclic hydrocarbon content, UOP's PI-242 Par-Isom catalyst (higher platinum content compared to PI-244) should be considered

Experience

The PI-244 Par-Isom catalyst was introduced in 2007 and today has several sales. The PI-244 Par-Isom catalyst operates in both revamped units using existing equipment as well as grass-root designs and construction.

Physical properties

ABD (sock), lb/ft ³ (kg/m ³)	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-244 Par-Isom catalyst is subject to governmental regulation, and you must manage it safely and in accordance with all applicable requirements.

Packaging

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

For more information

For more information on the PI-244 Par-Isom catalyst or other UOP catalysts, please contact your UOP representative or visit us online at www.uop.com.

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