

PuriStar® R3-26 T5x3

CuO/Fe₂O₃ Tablets

BASF PuriStar® R3-26 is a next generation adsorbent and is tailor-made for the removal of CO from polymer-grade ethylene.

BASF PuriStar® R3-26 is offered in tableted form with a nominal diameter of 5 mm and a height of 3 mm (approx. 3/16" x 1/8").

Product Applications

R3-26 has been specifically developed for the removal of CO from ethylene.

The ethylene is used primarily as monomer in the production of polyethylene (PE, with focus on HDPE and LLDPE processes) or as co-monomer in polypropylene (PP) processes.

Depending on the process, PuriStar® R3-26 can be used at temperatures of up to 100°C (210°F).

In comparison to R3-16, R3-26 can be used

- At lower temperatures (40 – 50°C / 100 – 120°F) offering at least the same performance as R3-16 used at higher temperatures.
- At higher temperatures (80 – 90°C / 175 – 195°F) offering significantly higher capacity compared to R3-16.

In case of use at lower temperature, significant reductions in energy use and emissions of GHG can be achieved.

The lifetime of PuriStar® R3-26 catalyst depends on the application, the operating conditions, and the level of contaminants such as acetylene, arsine, sulfur, as well as any other poisons present in the feed. Typical lifetimes will range from 2 to 5 years or more.

The material can be regenerated. Details are documented in a separate technical guideline.

Storage

PuriStar® R3-26 can be stored for long times in its original containers, provided the drums or bags are kept indoors in a non-corrosive atmosphere.

Typical Properties

Chemical

Main Components CuO and Fe₂O₃

Balance Alumina and Promoters

Physical

Crush Strength At least 90 N (9 lbs), side wall

Bulk Density ~ 1140 kg/m³ (71 lbs/ft³), tapped

~ 1060 kg/m³ (66 lbs/ft³) sock loaded

* These indicative properties do not represent process capabilities nor specifications.

Before being put into operation, R3-26 needs to be dried under air. Please contact BASF for further details.

Packaging

- 1150-liter super sacks (IBC flexible)
- 200-liter steel drums

Shipping Point

- Ludwigshafen, Germany

About Us

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The business comprises chemical catalysts and adsorbents, refinery catalysts and custom catalysts. In the process catalysts business, priority is given to developing new and improved products that enable the chemical industry transformation to net-zero emissions.

The division's portfolio also includes battery materials and recycling solutions, as well as environmental catalysts and metal solutions.

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