

# PuriStar® R0-25

## Pd Impregnated Extrudates

**BASF PuriStar® R0-25 was developed specifically for the catalytic combustion of organic compounds (VOCs) and other combustible compounds from industrial off-gases.**

BASF PuriStar® R0-25 is offered in the form of extrudates with a nominal diameter of 6 mm (S6) with Palladium as active component on a thermally stable alumina. Smaller diameters may be available on request. The material is delivered in oxidic form.

### Product Applications

PuriStar® R0-25 features include low light-off, robust activity and excellent high temperature stability. Nitrogen compounds, aliphatics, aromatics, olefins, oxygenates, hydrogen and carbon monoxide will be fully oxidized at the required reaction temperatures.

PuriStar® R0-25 can also be used to remove oxygen from hydrocarbon streams. It can tolerate trace levels of sulfur and halogens.

Most of these reactions are exothermic. Proper instrumentation may be needed to properly monitor and control these applications.

Depending on the process, PuriStar® R0-25 can be used up to temperatures of 700° C (1290° F).

An alternative to this product can be 0.1% Pd/AS R5279, 0.3% Pd/AS R5280 or 0.5% Pd/AS R5281, or a combination thereof and all are supplied by BASF Italia in Rome.

### Special Operations

PuriStar® R0-25 needs to be dried before use when used in dry streams.

### Poisons

As every Pd containing catalysts, PuriStar® R0-25 is sensitive against Sulfur and its components especially if present in larger quantities. Heavy metal containing compounds like AsH<sub>3</sub> can also have a detrimental effect on its performance.

### Storage

PuriStar® R0-25 does not deteriorate or constitute any hazard when stored in sealed containers. The containers should not be allowed to become damp or wet.

### Target Properties\*

|  |   |
|--|---|
| <b>Chemical Comp.</b><br>(volatile free) | 0.15 or 0.5 % wt./wt. Pd on special alumina |
|--|---|

### Typical Physical Propert

|                |   |
|----------------|---|
| Crush Strength | Min. 5 kg (11 lbs) knife edge   |
| Bulk Density   | ~ 900 kg/m <sup>3</sup> (56 lbs/ft <sup>3</sup> ), tapped<br>~ 840 kg/m <sup>3</sup> (52 lbs/ft <sup>3</sup> ), sock loaded |

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

### Packaging

- 90 kg net (198.4 lbs) in 120-liter steel drums

### Delivery Point

- Ludwigshafen, Germany

## About Us

BASF is a leading global manufacturer of catalysts for the chemical industry, with solutions across the chemical value chain. 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. Customers from a variety of industries including Automotive & Transportation, Chemicals, Plastics or Energy & Resources benefit from our innovative solutions. Further information on BASF's Catalysts division is available on the Internet at [www.catalysts.basf.com](http://www.catalysts.basf.com).

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