

PuriStar® R0-20 K2-4

Pd Impregnated Spheres

BASF PuriStar® R0-20 is primarily used for the removal of Oxygen and Hydrogen from gas streams.

BASF PuriStar® R0-20 is offered in the form of spheres with a nominal diameter of 2-4 mm (K2-4).

Product Applications

PuriStar® R0-20 is a robust and versatile catalyst which is comprised of Palladium (present as palladium oxide when delivered) on a high surface alumina carrier. It is primarily used for the removal of O₂ and/or H₂ from gas streams, forming water as product. Applications include the purification of nitrogen, argon, and CO₂, as well as the manufacture of ultra-pure hydrogen. An example would be H₂ generated by electrolysis and fulfilling fuel cell specifications as is the case for Green H₂.

R0-20 also shows good activity for the hydrogenation of trace amounts (few ppm mol/mol) of acetylene as present in ethylene. It can also be used for catalytic incineration applications such as the removal of volatile organic compounds from different off-gases.



Depending on the process, PuriStar® R0-20 can be used up to a temperature of 550° C (1020° F).

For certain applications a reduction of the material is required. Please contact BASF for further details.

Typical Properties

Chemical

Pd 0.13, 0.25, 0.47 or 0.72 % wt./wt.

Physical

Crush Strength > 5 kg (11 lbs) knife edge

~ 750 kg/m³ (47 lbs/ft³), tapped

Bulk Density

~ 700 kg/m³ (43 lbs/ft³), sock loaded

Typical Packaging

- 140 kg net (308.6 lbs) in 200-liter steel drums

Delivery Point

- Ludwigshafen, Germany

About Us

BASF's Catalysts division is the world's leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF's Catalysts division develops unique, proprietary solutions that drive customer success.

BASF - We create chemistry

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