

Product Data Sheet

Perlkat 97-0 Silica Gel

High purity catalyst substrate spheres

BASF offers a spherical silica gel designed to provide catalyst manufacturers with a unique substrate tailored to meet their specific needs.

Perlkat[®] 97-0 is a high-purity, beadshaped, amorphous silica gel. It is being successfully utilized as a catalyst support. The use of a support material is critical for heterogeneous catalysis which is primarily determined by the nature of the reaction system.

Perlkat 97-0's superior pore structure allows for a fine dispersion of the active catalytic species on its surface as a support. It has a pore size distribution which allows for the free transport of the reaction species and products to and from the active sites. Underlying Perlkat 97-0's suitability as a catalyst support is its high specific surface area and pore volume.

The high purity of Perlkat 97-0 ensures its inert character and the suitability for high temperature use over a long period.

The bead shape of Perlkat 97-0 results in excellent mechanical stability which proves to be an important advantage for catalytic applications. The spherical shape also provides excellent void space and flow distribution through the catalyst bed. Availability in a range of various bead sizes allows optimization of the pressure drop.

Product Benefits

- Amorphous
- Superior pore structure
- High purity
- Spherical form

Packaging

- 1000 L bags
- 200 L steel drums

Chemical Composition	
SiO ₂ , wt %	min. 99.8
Al ₂ O ₃ , wt %	max. 0.1
Na, wt %	max. 0.1
SO4, wt %	max. 0.1
Physical Properties	
Packed Bulk Density, kg/L	min. 0.45
Crushing Strength, N/bead	min. 60
Attrition Rate, wt %	max. 0.5
Water Resistance	
Pore Structure Characteristics	
Surface Area, m²/g	min. 300
Pore Volume, cm ³ /g	min. 0.75
Bead Sizes	
3 – 5 mm or 1 – 3 mm	

Others available upon request



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

Americas

BASF Corporation 25 Middlesex/Essex Turnpike Iselin, New Jersey, 08830, USA Tel : +1-732-205-5000 Fax: +1-732-205-7725 Email: catalysts-americas@basf.com

Asia Pacific

BASF (China) Company Limited 300 Jiang Xin Sha Road, Pudong, Shanghai 200137 P.R. China Tel: +86-21-2039 2549 Fax: +86-21-2039 4800-2549 Email: catalysts-asia@basf.com

Europe, Middle East, Africa

BASF De Meern BV Catalysts The Netherlands Tel: +31-30-666 9437 Email: catalysts-europe@basf.com

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