

Perlkat 46-10 Spheres

Silica-alumina gel as catalyst substrate

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

Perlkat[®] 46-10, a bead shaped, amorphous silica gel with high alumina content, has been commercially successfully applied as a catalyst support for many years.

The choice of the support is crucial for heterogeneous catalysis. Perlkat 46-10 allows a fine dispersion of the active catalytic species on the surface of the support.

Support materials for heterogeneous catalysis are characterized by their pore structure. Perlkat 46-10 has a pore size distribution which allows the free transport of the reaction species and products to and from the active sites. Perlkat 46-10 high specific surface area and pore volume underlines its superior suitability as a catalyst support.

Perlkat 46-10 silica-alumina gel has a high content of alumina which ensures beneficial effects in catalytic applications.

The bead shape of Perlkat 46-10 results in excellent mechanical stability, which proves to be an important advantage for catalytic applications.

The spherical shape also provides good void space and flow distribution through the catalyst bed.

The availability of various different bead sizes allows optimization of the pressure drop.

Product Benefits

- Superior pore structure
- High aluminum content
- Spherical form
- Different bead sizes

Packaging

- 1000 L bags
- 200 L steel drums

Chemical Composition

SiO ₂ , wt %	> 90
Aluminum as Al ₂ O ₃ , wt %	~ 5
Sodium, wt %	< 0.1
Sulfate, wt %	< 0.1

Physical Properties

Packed Bulk Density, g/cm ³	~ 0.7
Crushing Strength, N/bead	> 100
Attrition Rate, wt %	< 0.1
Water Resistance	Yes

Pore Structure Characteristics

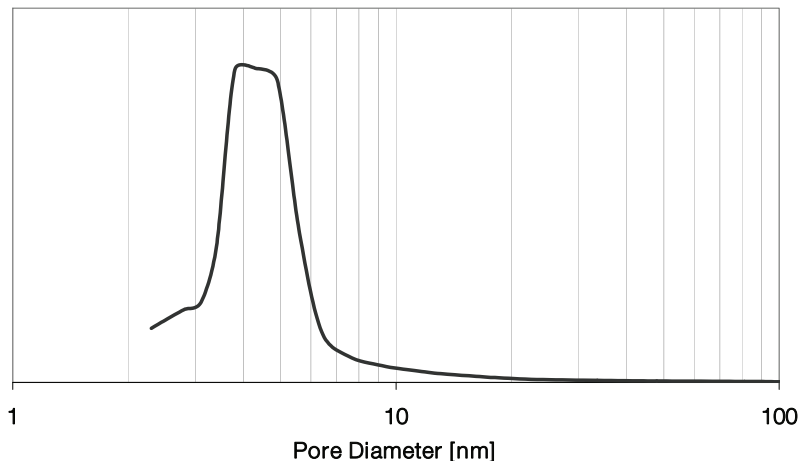
Surface Area, m ² /g	360
Pore Volume, cm ³ /g	0.44

Bead Sizes

1 – 4 mm or 1 – 3 mm

Others available upon request

Pore Size Distribution on the Basis of Nitrogen Adsorption



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 Catalysts develop unique, proprietary catalyst and adsorbent solutions that drive customer success.

BASF - We create chemistry

BASF Catalysts Headquarters

BASF Catalysts
25 Middlesex/Essex Turnpike
Iselin, New Jersey, 08830, USA
Tel: +1-732-205-5000
Fax: +1-732-205-7725
Email: catalysts-america@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 SE
BASF Nederland B.V.
Tel: +31-30-6669555
Fax: +31-30-6669340
Email: catalysts-europe@basf.com

BASF Catalysts Germany GmbH

Freundallee 23
30173 Hannover, Germany
Tel: +49-511-28-86-60
Fax: +49-511-28-86-760
Email: sorbead@basf.com

Perkat is a trademark of BASF.

All data represents typical product properties and are based upon BASF standard test methods. All test methods are available upon request.

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required. © 2009 BASF