

# CP Alumina Powders

## Calcined, Rehydratable Aluminas

**BASF's CP alumina powders are calcined, rehydratable aluminas which form strong hydroxyl bonds on contact with water. They are offered in three popular size ranges for optimum performance. They have proven valuable in many catalyst and specialty product applications.**

### Applications

BASF CP alumina powders are low cost catalyst precursor alumina. Their unique characteristic is that the surface readily rehydrates on contact with water, and is then capable of forming strong hydroxyl bonds with other similar surfaces.

Our standard products' particle size distributions are optimized for many applications and custom distributions are available on special request. BASF CP alumina powders are used in formulating spray-dried products, alumina spheres and extrusions.

Controlled rehydration of the powders can be used to impact desirable surface area and pore size distributions in the final products.

For example, spheres made with BASF CP alumina powders can have surface areas as high as 400 m<sup>2</sup>/g with bimodal pore volume distributions.

As another example, in fluid cracking catalysts (FCC), CP alumina powders contribute bottoms cracking, coke selectivity and thermal stability.

The exact conditions for optimum rehydration are highly process dependent, which is why size distributions are offered. BASF provides consultative expertise on how to achieve optimum performance for various formulations and preparation routes.

### Available Packaging

- 2000 lb super sacks
- Bulk trucks

Typical Chemical Composition (%)	CP-5, DD-290
SiO <sub>2</sub>	< 0.02
Fe <sub>2</sub> O <sub>3</sub>	< 0.01
Na <sub>2</sub> O	< 0.4
LOI (250° – 1100°C)	7
Residual Moisture (dried at 250°C for 30 minutes)	2

Typical Physical Properties	CP-5	DD-290
Surface Area, m <sup>2</sup> /g	270	275
Packed Bulk Density, lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	38	44
Particle Size Distribution, microns (average size)	5	8
Particle Size Distribution, microns (90 wt% <)	12	25
XRD Phase	All products are amorphous	

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

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