

NanoSelect™ Pt Pt-100

BASF's Pt-100 is a carbon powder based catalyst containing 0.8wt% of platinum as unimodal, highly dispersed, and reduced metal crystallites. The catalyst is supplied as a water-wet paste but can also be supplied in dry form.

NanoSelect catalysts are characterized by unimodal metal particles on the nanometer scale. Nanotechnology is science and controlled engineering on the scale of nanometers (billionths of a meter). Reducing the size of metal particles to nanometers:

- Greatly increases the metal surface area available per gram.
- Boosts the catalytic activity.
- Demonstrates different catalytic behavior.

BASF used these basic principles to develop the innovative, patented NanoSelect technology. This technology utilizes a BASF reagent to combine reducing and stabilizing functions that produce highly unimodal, nano-sized metal colloids. These colloids can be deposited onto different support materials resulting in heterogeneous catalysts that show unique catalytic behaviors.

BASF NanoSelect Pt catalysts have specifically been designed to deliver high activity at low metal content while showing very high selectivity in the hydrogenation reaction.

Suggested Applications

BASF's Pt-100 catalyst is recommended for use in hydrogenation reactions where typically platinum catalysts are being suggested. This catalyst has been shown to be specifically well suited for the selective hydrogenation of a nitro group in molecules containing also other functional groups like ketones, nitriles and halides as they are typically not affected by this catalyst.

Availability

Research quantities are available by order through Strem Chemicals, Inc. on the web at www.strem.com/basf. Commercial quantities are available directly from BASF by calling one of the following regional offices:

- + 1 973-245-7447 (Americas)
- + 39 064-199-2605 (EMEA)
- + 91 22-616-4159 (Asia Pacific)

Typical Properties

Active metal	Pt
Metal content, wt %	0.8
Type	Reduced, water-wet
Support	Carbon powder
Mean particle size	25 micron

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 catalyst and adsorbent solutions that drive customer success.

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