



We create chemistry

## Product Datasheet

# NanoSelect™ Pt

## Pt-110

BASF's Pt-110 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 giving heterogeneous catalysts showing 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-110 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](http://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)
- + 86 21-2039-2549 (Asia Pacific)

#### Typical Properties

Active metal	Pt
Metal content, wt%	0.8
Type	Reduced, water-wet
Support	Carbon powder
Mean particle size	23 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 solutions that drive customer success.

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### Americas

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

### Asia Pacific

BASF (China) Co., Ltd.  
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](mailto: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](mailto:catalysts-europe@basf.com)

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