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. 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)

<table>
<thead>
<tr>
<th>Typical Properties</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Active metal</td>
<td>Pt</td>
</tr>
<tr>
<td>Metal content, wt%</td>
<td>0.8</td>
</tr>
<tr>
<td>Type</td>
<td>Reduced, water-wet</td>
</tr>
<tr>
<td>Support</td>
<td>Carbon powder</td>
</tr>
<tr>
<td>Mean particle size</td>
<td>23 micron</td>
</tr>
</tbody>
</table>
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

NanoSelect is a trademark of BASF.

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. © 2017 BASF