

# Noblyst® P1092

## Palladium on Activated Carbon Powder Catalyst

Noblyst® P1092 5% Pd is a palladium on activated carbon catalyst for batch and continuous batch processes.

This catalyst shows superior catalytic performance along with excellent filtration properties. It can be produced at any one of our five production sites globally.

Applications:

- Hydrogenation processes
- Hydrogenation of CC Bonds, such as:
  - Hydrogenation of CC Double Bonds
  - Hydrogenation of CC Triple Bonds to Aliphatics
- Hydrogenation on CN Bonds, such as:
  - Hydrogenation of CN Triple Bonds to Primary Amines
  - Hydrogenation of CN Triple Bonds to Aldehydes
- Hydrogenation of C=O Bonds, such as:
  - Hydrogenation of Aromatic Carbonyls to Alkyls
- Reductive Alkylation and Amination, such as:
  - Aldehydes and Ketones to Primary Amines
  - Aldehydes and Ketones to Secondary Amines
- Hydrogenation of Aromatics, such as:
  - Hydrogenation of Heteroaromatics
- CC Coupling Reactions, such as:
  - Heck Reaction
  - Suzuki-Coupling

These reactions represent only some examples of the numerous applications this versatile catalyst can support.

### Physical-Chemical Properties

Properties	Unit	Value
Appearance	-	Black, very fine powder
Palladium content	wt. %	5
Water content	wt. %	50
Support	-	Activated Carbon

### Packaging

- Noblyst® P1092 5% Pd is delivered as a water wet free flowing powder in 210 liter (55 gallon) steel drums with polyethylene bag liners.
- For large volumes special packaging is available upon request.

### Storage

- Drums should be protected from freezing, not exposed to direct sunlight and stored in a dry place between 5 and 30°C (40 to 83°F).

### Activation

Not required.

### Precious metal full service loop

Evonik provides the full precious metal service loop including:

- Precious metal sales and purchasing
- Refining services
- Leasing and financing
- Related services, e.g. swaps, transfers, logistical assistance

### Additional services

Depending on the business model, Evonik may provide the following additional services:

- Technical support around the globe including handling recommendations, safety data sheets, literature, samples, etc.
- High-throughput screening for rapid identification of the most suitable catalysts for your applications
- Development of tailor-made catalysts in the context of an exclusive project

Evonik Industries has been a leader in chemical catalysts for more than 75 years. Now as before, customers all over the world rely on Evonik as a competent and trusted partner. Today Evonik is a fully integrated partner in catalysis, featuring homogeneous and heterogeneous catalysis. This makes Evonik unique, and gives our customers the flexibility of finding the most cost efficient solution for their needs. Working with Evonik means having direct access to our regional technical and commercial organization. With a passion for the catalyst business our experienced teams strive for quick response times and high quality tailored solutions to your catalyst topic.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

**Evonik Operations GmbH**

Business Line Catalysts  
Rodenbacher Chaussee 4  
63457 Hanau  
Germany  
PHONE +49 6181 59-13399  
FAX +49 6181 59-2699  
catalysts@evonik.com  
www.evonik.com/catalysts