

TECHNICAL DATA SHEET

Palladium on Carbon

NCAT 1121 / NCAT 1142 / NCAT 1143

Palladium on Carbon (Pd/C) forms a heterogeneous catalyst where palladium nanoparticles are supported on a porous carbon material. This support structure enhances the catalyst's surface area and provides an environment for the dispersion of palladium particles. The carbon support can take various forms, including powder, granules, or pellets, depending on the specific application. The combination of palladium and carbon allows for efficient catalysis, making Pd/C a valuable catalyst for a wide range of reactions, particularly in organic synthesis and selective hydrogenation processes. The specific form and characteristics of Pd/C can be tailored to meet the requirements of diverse catalytic applications.

- Palladium on Carbon (Pd/C) catalysts, particularly the NCAT 1121 Type, are highly effective in selective hydrogenation reactions like converting aromatic nitro group to amino group, o-debenzylolation reaction, ring hydrogenation of some aromatic compounds etc. These catalysts are available in powder form with varying palladium content (1% to 10%).

Palladium on Carbon Catalyst:

Palladium on Carbon catalysts is available in dry powder or 50% wet form

Characteristics:

Chemical composition on dry basis

Palladium	%	5.0 ± 0.1 10.0±0.2
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Physical Properties

Appearance		Black Colored wet Powder
Moisture	%	50.0 ± 5.0%

Applications:

▪ Hydrogenation of Aromatic nitro to amino group

- Hydrogenation of 3,5-Dinitrobenzoic acid to 3,5-Diammino benzoic acid
- Hydrogenation of o-Nitroanisole to o-Anisidine
- Hydrogenation of p-Nitrophenol to p-Aminophenol

▪ N, O-Debenzylolation

▪ Ring hydrogenation in aromatic compounds

▪ Hydrodehalogenation

▪ Hydrogenation of Styrene Oxide to Phenyl Ethyl Alcohol

*These are few examples of catalyst applications for reference, NCAT 1121, NCAT 1142, NCAT 1143 catalysts can be used in various other applications.

For Sales and Technical Support:

Contact:

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Website: www.neocat.in

Address:

N-72, Additional Ambernath MIDC, Anandnagar
Ambernath (East), Thane 421506, India.



Packaging:

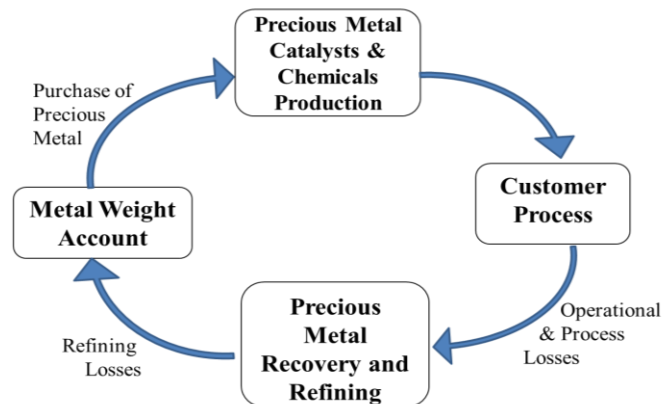
The catalyst is available in 25 and 50 kg packs in HDPP drums. For laboratory evaluation the catalyst can be supplied in 100 g to 1 kg scale in small plastic containers.

All data are based upon NEOCAT standard test methods, and all test methods are available upon request.

Storage:

- Always store in cool & shaded place, away from solvent & acid fumes.
- Ensure that the material remains in sealed condition, after removal of part quantity of catalyst

Precious Metal Cycle



- We offer the best recoveries in the industry from precious metal spent as well as spent from homogeneous catalysts

Services:

- We are working to develop highly selective catalysts and catalytic processes for various reactions
- Catalyst screening and hydrogenation process development.
- Technical support to improve the precious metal recoveries.

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