NanoSelect LF
Selective Hydrogenation Catalyst

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NanoSelect LF Catalysts contain 0.5-0.6% of Palladium and are leadfree. Unimodel metal crystallite sizes of around 7 nm on the support provide similar activity and selectivity performance characteristics to conventional Lindlar Catalysts that contain 5 wt% Palladium and Lead. The lead additive is undesirable as it restricts manufacturing and use due to regulations and toxicity.

These catalysts are suited for the selective hydrogenation of alkynes to alkenes where a high selectivity towards the cis-alkene is being observed. They can replace Lindlar catalysts.

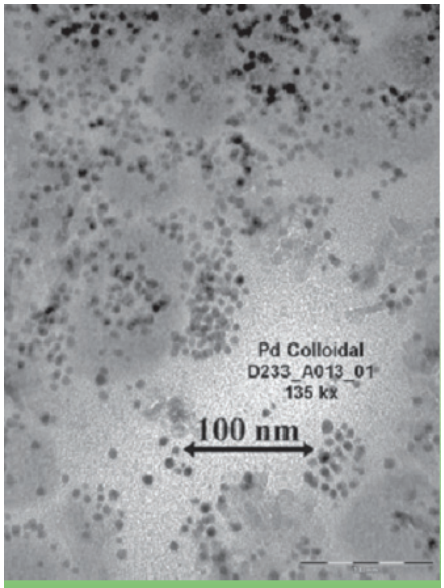

Figure 1: A Transition Electron Microscope photo of unsupported NanoSelect palladium-colloids.

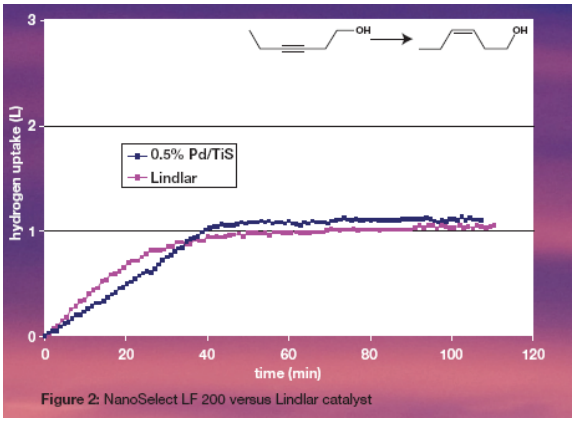

Figure 2: NanoSelect LF 200 versus Lindlar catalyst

46-1710	**Palladium, 0.6% on activated carbon, 50% water-wet paste (NanoSelect LF 100)** *[7440-05-3]* black pwdr. (d50=25 µm)	5g 25g

Technical Note:

1. Lead-free, water-wet, catalyst containing metal crystallite sizes of ~ 7 nm, and a mean particle size of 25 microns supported on a carbon powder. The nm-sized metal particles greatly increases the metal surface area and boosts catalytic activity. The catalyst is recommended for use in hydrogenation reactions leading to the partial reduction of functional groups. It is specifically suited for the selective hydrogenation of alkynes to alkenes, with a high selectivity for cis-alkenes and provides similar activity and selectivity performance to Lindlar Catalyst.

46-1711	**Palladium, 0.5% on titanium silicate, 50% water-wet paste (NanoSelect LF 200)** *[7440-05-3]* black pwdr. (d50=25 µm)	5g 25g

Technical Note:

1. Lead-free, water-wet, catalyst containing metal crystallite sizes of ~7 nm, and a mean particle size of 25 microns supported on titanium silicate powder. The nm-sized metal particles greatly increases the metal surface area and boosts catalytic activity. The catalyst is recommended for use in hydrogenation reactions leading to the partial reduction of functional groups. It is specifically suited for the selective hydrogenation of alkynes to alkenes, with a high selectivity for cis-alkenes and provides similar activity and selectivity performance to Lindlar Catalyst..

May replace Lindlar catalysts. Sold in collaboration with BASF for research purposes only.

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