Sigma-Aldrich®
Lab & Production Materials

● Preferred (first choice)
O Recommended

	5% Pd on activated carbon 907138	10% Pd on activated carbon 330108	20% Pd on activated carbon 330094	5% Pd on activated carbon 907839	5% Pd on activated carbon 907944	5% Pd on activated carbon 908061	5% Pd on activated carbon 907987	5% Pd on activated carbon 907995	5% Pd on activated carbon 908096	10% Pd on activated carbon 908029	5% Pd on activated carbon 908118	5% Pd on calcium carbonate 908002	5% Pd on alumina 908126	3% Pt on activated carbon 908169	5% Pt on activated carbon 908053	5% Pt on activated carbon 908150	5% Pt on activated carbon 908037	3% Pt on activated carbon 908088	10% Pt on activated carbon 907812	5% Rh on activated carbon 680710	5% Ru on activated carbon 908045	5% Ru on activated carbon 907871	5% Ru on alumina 908142	5% Pd on calcium carbonate 908134	2% Pt on activated carbon 907952	1% Pt on activated carbon 907820	5% Pt on activated carbon 908010	1% Pt on activated carbon 907898	4% Pd + 1% Pt on activated carbon 907936
Hydrogenation of CC Bonds																													
Hydrogenation of CC Double Bonds					●	●	●	O	O	O	O						●												
Hydrogenation of CC Triple Bonds to Aliphatics					●	●	●	O	O	O	O						●												
Hydrogenation of CC Triple Bonds to CC Double Bonds												●												●					
Fatty Acid and Fat Hardening					O			O	●	O																			
Hydrogenation of CN Bonds																													
Hydrogenation of CN Triple Bonds to Primary Amines					●	●		O	O	O										O									
CN Triple Bonds to Secondary and Tertiary Amines														O	●	O	●												
Hydrogenation of CN Triple Bonds to Aldehydes					●	●		O	O	O																			
Hydrogenation of CN Double Bonds (Imines)														O	O	●	●												
Hydrogenation of Hydrazones to Hydrazines														O	●	O	●												
Hydrogenation of C=O Bonds																													
Hydrogenation of Aliphatic Aldehydes and Ketones																O	●		O		●	●	O						
Hydrogenation of Sugars to Sugar Alcohols																					●	●	O						
Hydrogenation of Aromatic Carbonyls to Alcohols	●				O	O	●								●	O	●		O										
Hydrogenation of Aromatic Carbonyls to Alkyls		●	O	●	●				O	O											●	O	●						
Hydrogenation of Carboxylic Acids, Esters, and Anhydrides																													

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

MilliporeSigma

Sigma-Aldrich®
Lab & Production Materials

Hydrogenation of Nitro Groups																														
Aromatic Nitro Groups to Aromatic Amines						●			●					●	●	o		o							o			o	o
Aromatic Nitro Groups in Halonitroaromatics														o	o	o	o	o	o						●	●		●	
Aromatic Nitro Groups with Other Functional Groups																									●			●	
Aromatic Nitro Groups to Hydroxylamines												●	●					●											
Aromatic Nitro Groups to *para*-Aminophenols														o	●		●												
Hydrogenation of Aliphatic Nitro Groups	o					●	o				●				o	●	o												
Hydrogenolysis Reactions																														
O-Debenzylation (Cleavage of the C-O Bond)		●	●	●	o	o			o	o																				o
N-Debenzylation (Cleavage of the C-N Bond)		●	●	●	o	o			o	o																				o
Removal of the Cbz (*Z*) Protection Group	●	●	o				●			o	●																			o
Rosenmund Reduction							●				●																			
Hydrodehalogenation of Aliphatics	●					o	●				●																			
Hydrodehalogenation of Aromatics	●				o	o	●			o	●																			
Reductive Alkylation and Amination																														
Aldehydes and Ketones to Primary Amines	o				●			o	o		●																			
Aldehydes and Ketones to Secondary Amines	o				●			o	o		●			o	o			●												
Hydrogenation of Aromatics																														
Hydrogenation of Heteroaromatics	●				●				o	o	o									●	o	o	o							
Hydrogenation of Aromatics (partial)																					●	●	●							
Hydrogenation of Aromatics (total)																				●	o	o	o							

Sigma-Aldrich®
Lab & Production Materials

Dehydrogenations and Oxidations																													
Dehydrogenation of Carbocyclic Rings to Aromatics	●					o	●				●																		
Oxidations of Alcohols and Sugars										o				o	o	o	o		o									●		
CC Coupling Reactions																													
Heck Reaction	●	o			●	●	●																						
Suzuki-Coupling	●	o			●	●	●																						

To Place an Order or Receive Technical Assistance

In the U.S. and Canada, call toll-free
1(800)-645-5476

For other countries across Europe, call
+44 (0) 115 943 0840

For other countries across Europe
and the world, please visit
SigmaAldrich.com/offices

For Technical Service, please visit
SigmaAldrich.com/techservice

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
Germany

© 2020 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. Merck, Sigma-Aldrich, and the Vibrant M are trademarks of Merck KGaA, Darmstadt, Germany and or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.