Heterogeneous Catalyst Kit Applications Table

		1% Pt/C	5% Pt/C					5% Pt(S)/C	5% Pt/Al_2O_3	5% Pd/C										5% Pd/Al_2O_3	5% $Pd(Pb)/CaCO_3$	5% $Pd/BaSO_4$	10% Pd/C						5% Rh/C		5% Rh/Al_2O_3	5% Ru/C		5% Ru/Al_2O_3
		1R128M	5R103	5R117	5R128M	B103018-5	B103032-5	B106032-5	B312099-5	5R39	5R424	5R452	5R487	5R58	5R87L	A102023-5	A405028-5	A503023-5	A503032-5	A302011-5	A310050-5	A308053-5	10R39	10R424	10R487	10R87L Pow	A402028-10	5R20D	C101023-5	C301099-5	5R619	D101002-5	D302011-5
Carbocycles	Aniline to cyclohexylamine																										■	■				
	Benzyl halide to cyclohexylmethyl halide																										■	■	■			
	Carbocyclic ring						■		■						■	■												■	■	■	■		
	Partial carbocylic ring								■																					■	■	■
	Phenol to cyclohexane				■		■																									
	Phenol to cyclohexanol																										■	■	■			
	Phenol to cyclohexanone												■		■	■																
Heterocycles	Carbocylic and heteroaromatic reduction																										■	■				
	Furans											■				■												■				
	Pyridines				■		■																■	■			■	■	■			
	Pyrroles				■		■																					■				
	Selective heteroaromatic reduction										■						■						■	■			■					
Carbon-Carbon Multiple Bonds	Alkene to alkane				■		■				■	■					■	■										■				
	Alkyne to alkane										■	■					■	■														
	Cyclic alkene to cyclic alkane				■		■					■						■														
	Halo vinyl to halo alkane				■	■	■																									
	Selective alkene reduction different substitution											■	■			■		■														
	Selective alkene reduction same substitution																			■												
	Alkyne to alkene																				■											
Carbonyl Compounds	Aldehyde to aliphatic alcohol				■		■		■																						■	
	Ketone to aliphatic alcohol				■		■		■																						■	
	Aldehyde to aromatic alcohol												■					■														
	Alkylcetophenone to cyclohexyl alkyl alcohol																											■		■		
	Benzaldehyde to toluene									■							■	■														
	Ketone to aromatic alcohol												■			■		■														
	Substituted benzylalcohol to phenylalkane									■							■	■														
	α-β-unsaturated aldehyde to unsaturated alcohol					■	■		■																							
Nitro, Nitroso & Halonitroaromatic Compounds	Alkyl α-β-unsaturated nitro to alkyl amine										■	■					■	■														
	Nitro to aliphatic amine			■	■		■		■			■					■	■														
	Nitro to aromatic amine				■		■		■			■					■	■														
	Nitro to aromatic hydrazine dimer											■						■	■													
	Nitro to aromatic hydroxylamine	■						■																								
	Nitroso to aliphatic amine				■							■						■	■													
	Nitroso to aromatic amine				■							■						■	■													
	Phenyl α-β-unsaturated nitro to phenyl ethyl amine										■	■					■	■														

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Reductive Aminations & Alkylations	Reductive amination from ketone										■			■				■	■													
	Reductive alkylation from ketone			■			■	■		■					■			■														
	Nitro reduction and reductive alkylation from ketone							■		■					■																	
	Imine to amine				■		■			■						■		■														
Imines & Oximes	Amino imine to hydrazine			■	■		■																									
	Oxime to amine													■				■	■									■				
	Oxime to hydroxylamine													■		■			■													
Nitriles	Nitrile to 1°–aliphatic amine RNH_2		■				■							■					■								■	■				
	Nitrile to 2°–aliphatic amine R_2NH													■					■													
	Nitrile to 3°–aliphatic amine R_3N											■							■									■				
	Nitrile to 1°–aromatic amine RNH_2				■		■					■							■													
	Nitrile to 2°–aromatic amine R_2NH		■				■					■							■													
	Nitrile to aldehyde																	■														
Hydrogenolysis	Aryl and alkyl halide hydrodehalogenation										■		■					■														
	Rosenmund reduction																					■										
	Vinyl halide to alkane									■	■	■					■	■														
	Benzyl X cleavage									■	■	■						■														
	O-debenzylation									■	■	■											■				■					
	N-debenzylation									■	■	■											■				■					
	N-decarbobenzyloxylation									■	■	■					■						■				■					
	O-decarbobenzyloxylation									■	■	■					■						■				■					
	Epoxide opening									■							■	■														
Transfer Hydrogenation	Nitro to amine											■	■			■		■														
	Alkene to alkane											■	■			■		■														
	O-/N-debenzylation											■						■							■							
	O-/N-decarbobenzyloxylation											■						■							■							
Dehydrogenation & Alcohol Oxidation	Cyclohexane to benzene																									■						
	Cyclohexene to benzene																									■						
	Alkene to alkane																									■						
	Alcohol to acid				■																										■	
	Alcohol to aldehyde				■																										■	
	Alcohol to carbonyl				■																										■	

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