



Heterogeneous Catalyst Kit Applications Table



Heterogeneous Catalyst Kit
Applications Table

		1% Pt/C	5% Pt/C					5% Pt(S)/C	5% Pt/Al ₂ O ₃	5% Pd/C								5% Pd/Al ₂ O ₃	5% Pd(Pb)/CaCO ₃	5% Pd/BaSO ₄	10% Pd/C					5% Rh/C	5% Rh/Al ₂ O ₃	5% Ru/C	5% Ru/Al ₂ O 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 carbocyclic ring																																
	Phenol to cyclohexane																																
	Phenol to cyclohexanol																																
	Phenol to cyclohexanone																																
Heterocycles	Carbocyclic 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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		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				
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 ₂ NH																																				
	Nitrile to 3°-aliphatic amine R ₃ N																																				
	Nitrile to 1°-aromatic amine RNH ₂																																				
	Nitrile to 2°-aromatic amine R ₂ NH																																				
	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																																				