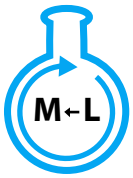
Johnson Matthey

Catalysis and Chiral Technologies

HETEROGENEOUS CATALYSTS

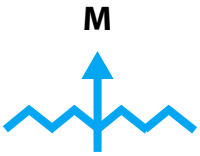


HOMOGENEOUS CATALYSTS

LIGANDS

CHIRAL CATALYSTS

CHIRAL ALCOHOLS



SCAVENGING TECHNOLOGIES

PRODUCT LISTING

Homogeneous Catalysts

Palladium

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
$PdCl_2$	palladium (II) chloride	$[PdCl_2]$	7647-10-1	60.00%	177.33
Pd-61	bis(benzonitrile)dichloro palladium(II)	$PdCl_2(NC(C_6H_5))_2$	14220-64-5	27.74%	383.57
Pd-62	bis(acetonitrile)dichloro palladium(II)	$PdCl_2(CH_3CN)_2$	14592-56-4	41.02%	259.43
Pd-63	tetrakis(acetonitrile)palladium(II)tetrafloroborate	$[Pd(CH_3CN_4)]\ (BF_4)_2$	21797-13-7	23.96%	444.24
Pd-70	$Pd(acac)_2$	$Pd(CH_3COCHCOCH_3)_2$	14024-61-4	34.93%	304.64
Pd-90	$PdCl_2(cod)$	$PdCl_2(C_8H_{12})$	12107-56-1	37.27%	285.51
Pd-91	$PdCl_2(nbd)$	$PdCl_2(C_7H_8)$	12317-46-3	39.49%	269.47
Pd-93	$Pd(dba)_2$	$Pd[(C_6H_5CH{=}CH)_2CO]_2$	32005-36-0	18.51%	575.02
Pd-94	$Pd_2(dba)_3$	$Pd_2[(C_6H_5CH{=}CH)_2CO]_3$	51364-51-3	23.24%	915.75
Pd-95	$Pd_2(dba)_3xCHCl_3$	$Pd_2[(C_6H_5CH{=}CH)_2CO]_3CHCl_3$	52522-40-4	20.56%	1035.11
Pd-100	$PdCl_2(PPh_3)_2$	$PdCl_2[P(C_6H_5)_3]_2$	13965-03-2	15.16%	701.91
Pd-101	$Pd(PPh_3)_4$	$Pd[P(C_6H_5)_3]_4$	14221-01-3	9.20%	1155.58
Pd-102	$Pd(OAc)_2(dppp)$	$Pd(CH_3CO_2)_2[(C_6H_5)_2P(CH_2)_3P(C_6H_5)_2]$	149796-59-8	16.71%	636.96
Pd-103	$PdCl_2(dppe)$	$PdCl_2[(C_6H_5)_2P(CH_2)_2P(C_6H_5)_2]$	19978-61-1	18.48%	575.75
Pd-104	$Pd(OAc)_2(PPh_3)_2$	$Pd(CH_3CO_2)_2[P(C_6H_5)_3]_2$	14588-08-0	14.21%	749.09
Pd-105	$PdCl_2(dppb)$	$PdCl_2((C_6H_5)_2P(CH_2)_4P(C_6H_5)_2)$	29964-62-3	17.62%	603.80
Pd-106	$PdCl_2(dppf)xCH_2Cl_2$	$PdCl_2[(C_5H_4P(C_6H_5)_2)_2Fe]\ CH_2Cl_2$	95464-05-4	13.00%	816.64
Pd-107	$PdCl_2(dppf)x\ (CH_3)_2CO$	$PdCl_2[(C_5H_4P(C_6H_5)_2)_2Fe]\ (CH_3)_2CO$	851232-71-8	13.47%	789.79
Pd-110	$[Pd(allyl)Cl]_2$	$[PdCl(C_3H_5)]_2$	12012-95-2	58.17%	365.89
Pd-111	$[Pd(OAc)_2]_3$	$Pd_3(O_2CCH_3)_6$	3375-31-3	47.40%	673.53
Pd-113	$[Pd(\mu\text{-}Br)t\text{-}Bu_3P]_2$	$(t\text{-}C_4H_9)_3PPd(\mu\text{-}Br)_2PdP(t\text{-}C_4H_9)_3$	185812-86-6	27.38%	777.29
Pd-114	$PdCl_2[P(cy)_3]_2$	$PdCl_2[P(C_6H_{11})_3]_2$	29934-17-6	14.42%	738.19
Pd-115	$PdCl_2(P(o\text{-}tol)_3]_2$	$PdCl_2[P(CH_3C_6H_4)_3]_2$	40691-33-6	13.54%	786.07
Pd-116	$Pd(t\text{-}Bu_3P)_2$	$Pd[P(t\text{-}C_4H_9)_3]_2$	53199-31-8	20.82%	511.06
Pd-117	$PdCl_2(DPEPhos)$	$PdCl_2[[(C_6H_5)_2PC_6H_4]_2O]$	205319-06-8	14.87%	715.89
Pd-118	$PdCl_2(dtbpf)$	$PdCl_2[[(C_4H_9)_2PC_5H_4]_2Fe]$	95408-45-0	16.33%	651.75
Pd-119	$PdCl_2(dippf)$	$PdCl_2[[(C_3H_7)_2PC_5H_4]_2Fe]$	215788-65-1	17.87%	595.65
Pd-120	$PdBr_2[(o\text{-}tol)_3P]_2$	$PdBr_2[(CH_3C_6H_4)_3P]_2$	24554-43-6	12.16%	874.97
Pd-121	$PdBr_2(dppf)$	$PdBr_2[(C_5H_4P(C_6H_5)_2)_2Fe]$	124268-93-5	12.97%	820.62
Pd-122	$PdCl_2(t\text{-}Bu_2PhP)_2$	$PdCl_2[(C_4H_9)_2C_6H_5P]_2$	34409-44-4	17.11%	621.95
Pd-123	$PdCl_2$(BINAP) S-isomer	$PdCl_2[(C_6H_5)_2C_{20}H_{12}]$	253157-79-8	13.30%	800.01
Pd-124	$PdBr_2$(BINAP)	$PdBr_2[((C_6H_5)_2P)_2C_{20}H_{12}]$	366488-99-5	11.97%	888.91
Pd-125	PdI_2(BINAP)	$PdI_2[((C_6H_5)_2P)_2C_{20}H_{12}]$	_	10.83%	982.91
Pd-126	$PdCl_2(dppp)$	$PdCl_2[(C_6H_5)_2P(CH_2)_3P(C_6H_5)_2]$	59831-02-6	18.04%	589.78
Pd-127	$PdCl_2(dcypf)$	$PdCl_2[[(C_6H_{11})_2PC_5H_4]_2Fe]$	917511-90-1	14.08%	755.90
Pd-128	$PdBr_2(\ dtbpf)$	$PdBr_2[[(C_4H_9)_2PC_5H_4]_2Fe]$	1000310-63-3	14.37%	740.66
Pd-130	$Pd(Br_2(PPh_3)_2$	$[PdBr_2[P(C_6H_5)_3]_2$	25044-96-6	13.46%	790.81
Pd-132	$PdCl_2(Amphos)_2$	$PdCl_2[(CH_3)_2)NC_6H_4P(t\text{-}C_4H_9)_2]_2$	887919-35-9	15.03%	708.08
Pd-133	$PdCl_2(dcypp)$	$PdCl_2[(C_6H_{11})_2P(CH_2)_3P(C_6H_{11})_2]$	1041005-52-0	17.33%	613.97
Pd-134	$PdCl_2$(Xant-Phos)	$PdCl_2(C_{39}H_{32}P_2O)$	205319-10-4	14.08%	755.96
Pd-136	PdCl(allyl)(QPhos)	$Pd(\eta^3\text{-}C_3H_5)Cl[(C_6H_5)_5C_5]Fe[C_5H_4P(C_4H_9)_2]$	1248656-98-5	11.91%	893.67
Pd-137	$Pd[(Cy)_3P]_2$	$Pd[P(C_6H_{11})_3]_2$	33309-88-5	15.95%	667.27
Pd-138	$PdI_2(dtbpf)$	$PdI_2[[(C_4H_9)_2PC_5H_4]_2Fe]$	_	12.75%	834.66
Pd-139	PdCl(allyl)(dtbnpP)	$PdCl(\eta^3\text{-}C_3H_5)[P(C_4H_9)_2(C_5H_{11})]$	1246775-56-3	26.65%	399.29
Pd-140	$PdCl_2$(DCEPhos)	$PdCl_2[(C_6H_{11})_2P(C_6H_4)O(C_6H_4)P(C_6H_{11})_2]$	1265140-81-5	14.38%	740.08
Pd-141	$Pd[(o\text{-}tol)_3P]_2$	$Pd[P(CH_3C_6H_4)_3]_2$	69861-71-8	14.88%	715.16
Pd-142	$PdBr_2(cod)$	$PdBr_2(C_8H_{12})$	12145-47-0	28.42%	374.41
Pd-145	$PdBr_2(dippf)$	$PdBr_2[[(C_3H_7)_2PC_5H_4]_2Fe]$	1154043-20-5	15.55%	684.55
Pd-146	$PdCl_2$(dppf) Solvent Free	$PdCl_2[(C_5H_4P(C_6H_5)_2)_2Fe]$	72287-26-4	14.54%	731.74
Pd-148	$Pd[P(tBu_2Ph)]_2$	$Pd[(t\text{-}C_4H_9)_2(C_6H_5)P]_2$	52359-17-8	19.31%	551.04
Pd-149	$Pd(AmPhos)_2$	$Pd[(CH_3)_2)NC_6H_4P(t\text{-}C_4H_9)_2]_2$	1233717-68-4	16.70%	637.18
Pd-150	$Pd(Q\text{-}Phos)_2$	$Pd[P(C_5H_4FeC_5(C_6H_5)_5(t\text{-}C_4H_9)_2]_2$	565441-56-7	6.97%	1527.86
Pd-152	PdCl(crotyl)(QPhos)	$Pd(\eta^3\text{-}C_3H_4\text{-}1\text{-}CH_3)Cl[(C_6H_5)_5C_5]Fe[C_5H_4P(C_4H_9)_2]$	1252598-33-6	11.72%	907.69
Pd-155	PdCl(cinnamyl)(QPhos)	$PdCl(\ \eta^3\text{-}C_3H_5\text{-}1\text{-}C_6H_5\ )[(C_6H_5)_5C_5]Fe[C_5H_4P(C_4H_9)_2]$	1255757-49-3	10.97%	969.76
Pd-158	PdCl(allyl)(Amphos)	$PdCl\ (\eta^3\text{-}C_3H_5)[p\text{-}(CH_3)_2)NC_6H_4P(t\text{-}C_4H_9)_2]$	1235509-04-2	23.74%	448.32
Pd-159	$Pd(Pivalate)_2$	$Pd_3[(O_2CC(CH_3)_3]_6$	106224-36-6	34.48%	308.67
Pd-160	$Pd(i\text{-}butyrate)_2$	$Pd_3[(O_2CCH(CH_3)_2]_6$	61261-73-2	37.92%	280.62
Pd-161	PdCl(crotyl)(Amphos)	$PdCl(\eta^3\text{-}C_3H_5\text{-}_1\text{-}CH_3)\ [p\text{-}(CH_3)_2NC_6H_4)P(t\text{-}C_4H_9)_2]$	1334497-06-1	23.02%	462.35
Pd-162	PdCl(crotyl)($PtBu_3$)	$PdCl(\eta^3\text{-}C_3H_5\text{-}_1\text{-}CH_3)[P(t\text{-}C_4H_9)_3]$	1334497-00-5	26.65%	399.29
Pd-163	PdCl(crotyl)(dtbnpP)	$PdCl(\eta^3\text{-}C_3H_5\text{-}_1\text{-}CH_3)[P(t\text{-}C_4H_9)_2CH_2(C_4H_9)]$	1334497-09-4	25.75%	413.32
Pd-164	$[PdCl(crotyl)]_2$	$[PdCl(C_4H_7)]_2$	12081-22-0	54.03%	393.94
Pd-166	$PdCl_2[(t\text{-}Bu)(Cy)_2P]_2$	$PdCl_2[(C_4H_9)(C_6H_5)_2P]_2$	104889-13-6	15.51%	689.12
BPC-101	XPhos Precatalyst	$C_{41}H_{59}ClNPPd$	1028206-56-5	14.40%	738.76
BPC-103	SPhos Precatalyst	$C_{34}H_{45}ClNO_2PPd \cdot 0.5CH_3OC_4H_9$	1028206-58-7	15.80%	760.72
BPC-104	BrettPhos Precatalyst	$C_{43}H_{63}ClNO_2PPd$	1148148-01-9	13.30%	798.81
BPC-106	RuPhos Precatalyst	$C_{38}H_{53}ClNO_2PPd \cdot CH_3OC_4H_9$	1028206-60-1	14.60%	816.83
BPC-201	XPhos Precatalyst 2nd generation	$C_{45}H_{59}ClNPPd\ .\ C_4H_8O$	1310584-14-5	12.39%	858.90
BPC-203	SPhos Precatalyst 2nd generation	$C_{38}H_{45}ClNO_2PPd\ .\ 1.5C_4H_8O$	1375325-64-6	12.84%	828.79
BPC-206	RuPhos Precatalyst 2nd generation	$C_{42}H_{53}ClNO_2PPd\ .\ 0.3C_4H_8O$	1375325-68-0	13.33%	798.37
BPC-301	Xphos Precatalyst 3rd generation	$C_{46}H_{62}NO_3PPdS$	_	12.57%	846.46
BPC-302	tBuXPhos Precatalyst 3rd generation	$C_{42}H_{58}NO_3PPdS$	_	13.40%	794.38
BPC-303	SPhos Precatalyst 3rd generation	$C_{39}H_{48}NO_5PPdS$	_	13.64%	780.30
BPC-304	BrettPhos Precatalyst 3rd generation	$C_{48}H_{66}NO_5PPdS$	_	11.74%	906.50
BPC-305	tBuBrettPhos Precatalyst 3rd generation	$C_{44}H_{62}NO_5PPdS$	_	12.46%	854.43
BPC-306	RuPhos Precatalyst 3rd generation	$C_{43}H_{56}NO_5PPdS$	_	12.72%	836.40

Platinum

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
Pt-62	cis–bis(acetonitrile)dichloroplatinum(II)	$Cis\text{–}PtCl_2(CH_3CN)_2$	13869–38–0	56.04%	348.10
Pt-70	$Pt(acac)_2$	$[Pt(CH_3COCHCOCH_3)_2$	15170-57-7	49.60%	393.30
Pt-90	$PtCl_2(nbd)$	$PtCl_2(C_7H_8)$	12152-26-0	54.47%	358.10
Pt-91	$PtI_2(cod)$	$PtI_2(C_8H_{12})$	12266-72-7	35.02%	557.08
Pt-96	$PtCl_2(cod)$	$PtCl_2(C_8H_{12})$	12080-32-9	52.14%	374.20
Pt-100	$cis\text{-}PtCl_2(PPh_3)_2$	$PtCl_2[P(C_6H_5)_3]_2$	15604-36-1	24.68%	790.60
Pt-112	cis- or trans-$PtCl_2(SEt_2)_2$	$PtCl_2[S(C_2H_5)_2S)_2$	15337-84-5	43.70%	446.40

Homogeneous Catalysts

Rhodium

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Rh-40	$RhCl(CO)(PPh_3)_2$	$RhCl(CO)(P(C_6H_5)_3)_2$	13938-94-8	14.89%	691.00
Rh-42	$RhH(CO)(PPh_3)_3$	$RhH(CO)(P(C_6H_5)_3)_3$	17185-29-4	11.20%	918.80
Rh-43	$Rh(acac)(CO)(PPh_3)$	$Rh(CH_3COCHCOCH_3)(CO)P(C_6H_5)_3$	25470-96-6	20.90%	492.30
Rh-50	$Rh(acac)(CO)_2$	$Rh(CH_3COCHCOCH_3)(CO)_2$	14874-82-9	39.88%	258.00
Rh-70	$Rh\ (acac)_3$	$Rh(CH_3COCHCOCH_3)_3$	14284-92-5	25.71%	400.20
Rh-92	$[RhCl(nbd)]_2$	$[RhCl(Cl_7H_8]_2$	12257-42-0	44.64%	461.00
Rh-93	$[RhCl(cod)]_2$	$[RhCl(C_8H_{12})]_2$	12092-47-6	41.74%	493.10
Rh-95	Rh(acac)(cod)	$Rh(C_8H_{12})(CH_3COCHCOCH_3)$	12245-39-5	33.17%	310.20
Rh-96	$Rh(cod)_2BF_4$	$[Rh(C_8H_{12})_2]BF_4$	35138-22-8	25.34%	406.10
Rh-97	$Rh(nbd)_2\ BF_4$	$[Rh(C_7H_8)_2]BF_4$	36620-11-8	27.52%	374.00
Rh-98	$[Rh(cod)_2]\ CF_3SO_3$	$[Rh(C_8H_{12})_2]CF_3SO_3$	99326-34-8	21.97%	468.30
Rh-100	Wilkinson's Catalyst, $RhCl(PPh_3)_3$	$RhCl[P(C_6H_5)_3]_3$	14694-95-2	11.12%	925.20
Rh-101	$RhBr(PPh_3)_3$	$RhBr[P(C_6H_5)_3]_3$	14973-89-8	10.61%	969.70
Rh-105	$RhH(PPh_3)_4$	$RhH[P(C_6H_5)_3P]_4$	18284-36-1	8.92%	1153.00
Rh-110	$[Rh(OAc)_2]_2$	$[Rh(O_2CCH_3)_2]_2$	15956-28-2	46.56%	442.00
Rh-115	$Rh(C_8H_{15}O_2)_2]_2$	$[Rh(O_2C(CH_2)_6CH_3)_2]_2$	73482-96-9	26.43%	778.60
Rh-116	$[Rh(tfa)_2]_2$	$[Rh(CF_3CO_2)_2]_2$	31126-95-1	31.28%	657.90

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Rh-120	$[RhCl_2Cp^*]_2$	$[RhCl_2[C_5(CH_3)_5])_2$	12354-85-7	33.30%	618.10
Rh-125	$Rh(nbd)_2\ CF_3SO_3$	$[Rh(C_7H_8)_2](CF_3SO_3)$	178397-71-2	23.59%	436.30
Rh-126	$Rh(acac)(C_2H_4)_2$	$Rh(CH_3COCHCOCH_3)(C_2H_4)_2$	12082-47-2	39.87%	258.10
Rh-127	Rh(acac)(nbd)	$Rh(CH_3COCHCOCH_3)(C_7H_8)$	32354-50-0	34.98%	294.20
Rh-128	$[Rh(cod)_2]SbF_6$	$[Rh(C_8H_{12})_2]SbF_6$	130296-28-5	18.54%	555.00
Rh-129	$[RhCp^*(cod)]$	$Rh[C_5(CH_3)_5]C_8H_{12}$	55787-63-8	29.71%	346.30
Rh-130	$[Rh(dcypf)(cod)]BF_4$	$[Rh[C_6H_{11})_2PC_5H_4]_2Fe](C_8H_{12})]BF_4$	_	11.74%	876.50
Rh-131	$[Rh(dcypf)(nbd)]BF_4$	$[Rh[(C_6H_{11})_2PC_5H_4]_2Fe](C_7H_8)]BF_4$	_	11.96%	860.40
Rh-132	$Rh(dippf)(cod)BF_4$	$[Rh[(C_3H_7)_2PC_5H_4]_2Fe](C_8H_{12})]BF_4$	157772-65-1	14.37%	716.20
Rh-133	$Rh(dippf)(nbd)BF_4$	$[Rh[(C_3H_7)_2PC_5H_4]_2Fe](C_7H_8)]BF_4$	_	14.70%	700.20
Rh-134	$[Rh(dppf)(cod)]BF_4$	$[Rh[(C_6H_5)_2PC_5H_4]_2Fe](C_8H_{12})]BF_4$	_	12.07%	852.30
Rh-135	$[Rh(dppf)(nbd)]BF_4$	$[Rh[(C_6H_5)_2PC_5H_4]_2Fe](C_7H_8)]BF_4$	_	12.31%	836.20
Rh-136	$[Rh(dtbpf)(nbd)]BF_4$	$[Rh[(C_4H_9)_2PC_5H_4]_2Fe](C_7H_8)]BF_4$	_	13.90%	740.20
Rh-137	$[Rh(dppb)(cod)]BF_4$	$[Rh[(C_6H_5)_2P(CH_2)_4P(C_6H_5)_2](C_8H_{12})]BF_4$	79255-71-3	14.21%	724.40
Rh-138	$[Rh(dppb)(nbd)]BF_4$	$[Rh[(C_6H_5)_2P(CH_2)_4P(C_6H_5)_2](C_7H_8)]BF_4$	_	14.53%	708.30
Rh-141	$[(cod)Rh(MeCN)_2]BF_4$	$[Rh(C_8H_{12})(CH_3CN)_2]BF_4$	32679-02-0	27.08%	380.00
Rh-143	$[Rh(OH)(cod)]_2$	$[Rh(OH)(C_8H_{12})]_2$	73468-85-6	45.12%	456.20
C2-905	[Rh cod(rac-Binap] BF_4	$C_{52}H_{44}BF_4P_2Rh$	439801-50-0	11.18%	920.56

Ruthenium

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Ru-41	$RuCl_2(CO)_2(PPh_3)_2$	$RhCl_2(CO)_2(P(C_6H_5)_3]_2$	14564-35-3	13.43%	752.58
Ru-42	$RuClH(CO)(PPh_3)_3$	$RuClH(CO)[(C_6H_5)_3P]_3$	16971-33-8	10.31%	952.41
Ru-70	$Ru(acac)_3$	$Ru(CH_3COCHCOCH_3)_3$	14284-93-6	25.37%	398.40
Ru-90	$[RuCl_2(cod)]n$	$[RuCl_2(C_8H_{12})]n$	50982-13-3	36.08%	280.16
Ru-100	$RuCl_2(PPh_3)_3$	$RuCl_2[P(C_6H_5)_3P]_3$	15529-49-4	10.54%	958.85
Ru-120	$[RuCl_2(p\text{-cymene})]_2$	$RuCl_2[(CH_3C_6H_4C_3H_7)]_2$	52462-29-0	33.01%	612.39
Ru-121	$[RuI_2(p\text{-cymene}]_2$	$[RuI_2(CH_3C_6H_4C_3H_7)RuI_2]_2$	90614-07-6	20.66%	978.20
Ru-122	$[RuCl_2(mesitylene)]_2$	$[RuCl_2(CH_3)_3C_6H_3)]_2$	52462-31-4	34.59%	584.34

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Ru-123	$[RuCl_2(benzene)]_2$	$[RuCl_2(C_6H_6)]_2$	37366-09-9	40.41%	500.18
Ru-124	$Ru(methylallyl)_2(cod)$	$Ru(C_8H_{12})(CH_2C(CH_3)CH_2)_2$	12289-94-0	31.64%	319.45
Ru-131	$[RuCl_3]xH_2O$	$[RuCl_3]xH_2O$	14898-67-0	38-43%	_
Ru-132	$(RuCl_2Cp^*)n$	$[RuCl_2((CH_3)_5C_5)]n$	96503-27-4	32.90%	307.20
Ru-133	$RuCl(cod)Cp^*$	$RuCl(C_8H_{12})(C_5(CH_3)_5)$	92390-26-6	26.60%	379.94
Ru-134	$RuClCp(PPh_3)_2\ C_2H_5OH$	$RuCl(C_5H_5)[P(C_6H_5)_3]_2\ C_2H_5OH$	32993-05-8	13.09%	772.27
Ru-135	$RuClCp^*(PPh_3)_2$	$RuCl[C_5(CH_3)_5][P(C_6H_5)_3]_2$	92361-49-4	12.69%	796.33
Ru-721	[dppb $RuCl_2$ Ampy]	$C_{34}H_{36}Cl_2N_2P_2Ru$	850424-32-7	14.30%	706.59
C1-720	[dppf $RuCl_2$ Ampy]	$C_{40}H_{36}Cl_2FeN_2P_2Ru$	1287255-62-2	12.11%	834.49
C1-723	[$(PPh_3)_2$ $RuCl_2$ Ampy]	$C_{42}H_{38}Cl_2N_2P_2Ru$	850346-94-0	12.56%	804.69

Iridium

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Ir-40	Vaska's Complex	$IrCl(CO)[P(C_6H_5)_3]_2$	14871-4-1	24.64%	780.26
Ir-90	Crabtree's Catlyst	$[Ir(C_8H_{12})(C_5H_5N)P(C_6H_{11})_3]\ PF_6$	64536-78-3	23.88%	804.90
Ir-91	$[IrCl(coe)2]_2$	$[Ir(C_8H_{14})_2Cl]_2$	12246-51-4	42.90%	896.14
Ir-92	$[Ir(OMe)(cod)]_2$	$[Ir(C_8H_{12})(OCH_3)]_2$	12148-71-9	58.00%	662.88
Ir-93	$[Ir(cod)Cl]_2$	$[IrCl(C_8H_{12})]_2$	12112-67-3	57.23%	671.71

Catalog ID	Description	Formula	CAS #	% Metal	Mol. Weight
Ir-115	$Ir(Cp^*)Cl_2]_2$	$[IrCl_2(C_5(CH_3)_5)]_2$	12354-84-6	48.25%	796.71
Ir-116	Ir(acac)(cod)	$Ir(C_8H_{12})(CH_3COCHCOCH_3)$	12154-84-6	48.11%	399.51
Ir-117	$Ir(acac)(CO)_2$	$Ir(CO)_2(CH_3COCHCOCH_3)$	14023-80-4	55.34%	347.35
Ir-118	$[Ir(cod)_2]BF_4$	$[Ir(C_8H_{12})_2]BF_4$	35138-23-9	38.80%	495.39
Ir-122	$[Ir(cod)_2]O_3SCF_3$	$[Ir(C_8H_{12})_2]O_3SCF_3$	413621-65-5	34.47%	557.66

Johnson Matthey
Catalysis and Chiral Technologies

Chiral Catalysts

CHIRAL CATALYSTS

Phosphine Ruthenium Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-200	[(R)-PPhos RuCl (benzene)]Cl	$C_{44}H_{40}Cl_2N_2O_4P_2Ru$	357401-22-0	11.30%	894.72
C1-210	[(S)-PPhos RuCl (benzene)]Cl	$C_{44}H_{40}Cl_2N_2O_4P_2Ru$	892155-38-3	11.30%	894.72
C1-202	[(R)-Xyl-PPhos RuCl (benzene)]Cl	$C_{52}H_{56}N_2O_4Cl_2P_2Ru$	442686-34-2	10.04%	1006.94
C1-212	[(S)-Xyl-PPhos RuCl (benzene)]Cl	$C_{56}H_{60}N_2O_4Cl_2P_2Ru$	1012063-75-0	10.04%	1006.94
C1-240	[(R)-PPhos RuCl (*p*-cymene)]Cl	$C_{48}H_{48}Cl_2N_2O_4P_2Ru$	220998-38-9	10.63%	950.83
C1-250	[(S)-PPhos RuCl (*p*-cymene)]Cl	$C_{48}H_{48}Cl_2N_2O_4P_2Ru$	1034001-47-2	10.63%	950.83
C1-242	[(R)-Xyl-PPhos RuCl (*p*-cymene)]Cl	$C_{56}H_{60}N_2O_4Cl_2P_2Ru$	1034001-49-4	9.51%	1063.00
C1-252	[(S)-Xyl-PPhos RuCl (*p*-cymene)]Cl	$C_{56}H_{60}N_2O_4Cl_2P_2Ru$	1036379-70-0	9.51%	1063.00
C1-260	[(R)-Binap RuCl (*p*-cymene)] Cl	$C_{54}H_{46}Cl_2P_2Ru$	145926-28-9	10.88%	928.87
C1-270	[(S)-Binap RuCl (*p*-cymene)]Cl	$C_{54}H_{46}Cl_2P_2Ru$	130004-33-0	10.88%	928.87

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-261	[(R)-Tol-Binap RuCl (*p*-cymene)]Cl	$C_{58}H_{54}Cl_2P_2Ru$	131614-43-2	10.26%	984.97
C1-271	[(S)-Tol-Binap RuCl (*p*-cymene)]Cl	$C_{58}H_{54}Cl_2P_2Ru$	228120-95-4	10.26%	984.97
C1-262	[(R)-Xyl-Binap RuCl (*p*-cymene)]Cl	$C_{62}H_{62}Cl_2P_2Ru$	944451-24-5	9.71%	1041.08
C1-272	[(S)-Xyl-Binap RuCl (*p*-cymene)]Cl	$C_{62}H_{62}Cl_2P_2Ru$	944451-24-6	9.71%	1041.08
C1-330	[(R)-Binap RuCl (benzene)]Cl	$C_{50}H_{38}Cl_2P_2Ru$	124069-39-2	11.58%	872.80
C1-340	[(S)-Binap RuCl (benzene)]Cl	$C_{50}H_{38}Cl_2P_2Ru$	126251-92-1	11.58%	872.80
C1-331	[(R)-Tol-Binap RuCl (benzene)]Cl	$C_{54}H_{46}Cl_2P_2Ru$	854274-96-7	10.88%	928.87
C1-341	[(S)-Tol-Binap RuCl (benzene)]Cl	$C_{54}H_{46}Cl_2P_2Ru$	126085-10-7	10.88%	928.87
C1-332	[(R)-Xyl-Binap RuCl (benzene)]Cl	$C_{58}H_{54}Cl_2P_2Ru$	_	10.26%	984.97
C1-342	[(S)-Xyl-Binap RuCl (benzene)]Cl	$C_{58}H_{54}Cl_2P_2Ru$	1229001-09-5	10.26%	984.97

Phosphine Rhodium Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C2-000	[Rh cod (R)-PPhos]BF_4	$C_{46}H_{48}BF_4N_2O_4P_2Rh$	573718-56-6	10.89%	944.54
C2-010	[Rh cod (S)-PPhos]BF_4	$C_{46}H_{48}BF_4N_2O_4P_2Rh$	_	10.89%	944.54
C2-020	[Rh cod (R)-Phanephos]BF_4	$C_{48}H_{46}BF_4P_2Rh$	849950-56-7	11.77%	874.54
C2-030	[Rh cod (S)-Phanephos]BF_4	$C_{48}H_{46}BF_4P_2Rh$	723343-30-4	11.77%	874.54
C2-022	[Rh cod (R)-Xyl-Phanephos]BF_4	$C_{56}H_{62}BF_4P_2Rh$	880257-53-4	10.43%	896.75
C2-032	[Rh cod (S)-Xyl-Phanephos]BF_4	$C_{56}H_{62}BF_4P_2Rh$	880136-41-4	10.43%	896.75
C2-023	[Rh cod (R)-An-Phanephos]BF_4	$C_{52}H_{54}O_4BF_4P_2Rh$	1038932-68-1	10.35%	994.64
C2-033	[Rh cod (S)-An-Phanephos]BF_4	$C_{52}H_{54}O_4BF_4P_2Rh$	_	10.35%	994.64

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C2-040	[Rh cod (R)-Binap]BF_4	$C_{52}H_{44}BF_4P_2Rh$	120521-81-5	11.18%	920.56
C2-060	[Rh cod (S)-Binap]BF_4	$C_{52}H_{44}BF_4P_2Rh$	208118-82-5	11.18%	920.56
C2-420	[Rh cod (R)-Phanephos] O_3SCF_3	$C_{49}H_{46}F_3O_3P_2RhS$	192464-14-5	10.98%	936.80
C2-430	[Rh cod (S)-Phanephos] O_3SCF_3	$C_{49}H_{46}F_3O_3P_2RhS$	200808-74-8	10.98%	936.80
C2-801	(R)-[Rh cod TCFP]BF_4	$C_{22}H_{44}BF_4P_2Rh$	705945-70-6	18.37%	560.24
C2-802	(S)-[Rh cod TCFP]BF_4	$C_{22}H_{44}BF_4P_2Rh$	705945-68-2	18.37%	560.24
C7-040	[Rh ((R)-Binap)$_2$]BF_4	$C_{88}H_{64}BF_4P_4Rh$	_	7.17%	1435.05
C7-050	[Rh ((S)-Binap)$_2$]BF_4	$C_{88}H_{64}BF_4P_4Rh$	98302-53-5	7.17%	1435.05

Phosphine Ruthenium Diamine Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-402	[(R)-Xyl-PPhos $RuCl_2$ (R,R)-Dpen]	$C_{60}H_{66}Cl_2N_4O_4P_2Ru$	832117-84-7 478308-93-9	8.86%	1141.11
C1-412	[(S)-Xyl-PPhos $RuCl_2$ (S, S)-Dpen]	$C_{60}H_{66}Cl_2N_4O_4P_2Ru$	821793-37-7 934671-59-7	8.86%	1141.11
C1-420	[(R)-Binap $RuCl_2$ (R,R)-Dpen]	$C_{58}H_{48}Cl_2N_2P_2Ru$	212143-23-2	10.04%	1006.94
C1-430	[(S)-Binap $RuCl_2$ (S,S)-Dpen]	$C_{58}H_{48}Cl_2N_2P_2Ru$	329736-05-2	10.04%	1006.94
C1-452	[(R)-Xyl-PPhos $RuCl_2$ (S,S)-Dpen]	$C_{60}H_{66}Cl_2N_4O_4P_2Ru$	_	8.86%	1141.11
C1-462	[(S)-Xyl-PPhos $RuCl_2$ (R,R)-Dpen]	$C_{60}H_{66}Cl_2N_4O_4P_2Ru$	916826-81-8	8.86%	1141.11
C1-600	[(R)-PPhos $RuCl_2$ (R)-Daipen]	$C_{57}H_{60}Cl_2N_4O_6P_2Ru$	1036379-67-5	8.94%	1131.03
C1-610	[(S)-PPhos $RuCl_2$ (S)-Daipen]	$C_{57}H_{60}Cl_2N_4O_6P_2Ru$	_	8.94%	1131.03

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-602	[(R)-Xyl-PPhos $RuCl_2$ (R)-Daipen]	$C_{65}H_{76}Cl_2N_4O_6P_2Ru$	918130-21-9	8.13%	1243.24
C1-612	[(S)-Xyl-PPhos $RuCl_2$ (S)-Daipen]	$C_{65}H_{76}Cl_2N_4O_6P_2Ru$	918129-65-4	8.13%	1243.24
C1-620	[(R)-Binap $RuCl_2$ (R)-Daipen]	$C_{63}H_{58}Cl_2N_2O_2P_2Ru$	329735-86-6	9.11%	1109.07
C1-630	[(S)-Binap $RuCl_2$ (S)-Daipen]	$C_{63}H_{58}Cl_2N_2O_2P_2Ru$	212143-24-3	9.11%	1109.07
C1-690	[(S)-Binap $RuCl_2$ (R)-Daipen]	$C_{63}H_{58}Cl_2N_2O_2P_2Ru$	_	9.11%	1109.07
C1-652	[(R)-Xyl-PPhos $RuCl_2$ (S)-Daipen]	$C_{65}H_{76}Cl_2N_4O_6P_2Ru$	_	8.13%	1243.24
C1-662	[(S)-Xyl-PPhos $RuCl_2$ (R)-Daipen]	$C_{65}H_{76}Cl_2N_4O_6P_2Ru$	_	8.13%	1243.24

Chiral Catalysts

CHIRAL CATALYSTS

Ruthenium Diamine Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-000	[(R,R)-TsDpen RuCl(*p*-cymene)]	$C_{31}H_{35}ClN_2O_2RuS$	192139-92-7	15.88%	636.21
C1-010	[(S,S)-TsDpen RuCl(*p*-cymene)]	$C_{31}H_{35}ClN_2O_2RuS$	192139-90-5	15.88%	636.21
C1-001	[(R,R)-MsDpen RuCl(*p*-cymene)]	$C_{25}H_{31}ClN_2O_2RuS$	300664-92-0	18.04%	560.11
C1-011	[(S,S)-MsDpen RuCl(*p*-cymene)]	$C_{25}H_{31}ClN_2O_2RuS$	329371-25-7	18.04%	560.11
C1-020	[(R,R)-TsDpen RuCl(mesitylene)]	$C_{30}H_{33}ClN_2O_2RuS$	174813-82-2	16.24%	622.18
C1-030	[(S,S)-TsDpen RuCl(mesitylene)]	$C_{30}H_{33}ClN_2O_2RuS$	174813-81-1 188753-47-1	16.24%	622.18

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Wt.
C1-021	[(R,R)-MsDpen RuCl(mesitylene)]	$C_{24}H_{28}ClN_2O_2RuS$	1160707-20-9	18.54%	545.09
C1-031	[(S,S)-MsDpen RuCl(mesitylene)]	$C_{24}H_{28}ClN_2O_2RuS$	300664-99-7 865488-44-4	18.54%	545.09
C1-100	[(R,R)-TsDACH RuCl (*p*-cymene)]	$C_{23}H_{33}ClN_2O_2RuS$	213603-12-4	18.77%	538.11
C1-110	[(S,S)-TsDACH RuCl (*p*-cymene)]	$C_{23}H_{33}ClN_2O_2RuS$	192057-12-8	18.77%	538.11

Ruthenium Tethered Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-300	C3-[(R,R)-teth-TsDpen RuCl]	$C_{30}H_{31}ClN_2O_2RuS$	1192620-83-9	16.30%	620.17
C1-310	C3-[(S,S)-teth-TsDpen RuCl]	$C_{30}H_{31}ClN_2O_2RuS$	851051-43-9	16.30%	620.17
C1-350	C4-[(R,R)-teth-TsDpen RuCl]	$C_{31}H_{33}ClN_2O_2RuS$	-	15.94%	634.19
C1-360	C4-[(S,S)-teth-TsDpen RuCl]	$C_{31}H_{33}ClN_2O_2RuS$	-	15.94%	634.19
C1-301	C3-[(R,R)-teth-MsDpen RuCl]	$C_{24}H_{27}ClN_2O_2RuS$	-	18.58%	544.07
C1-311	C3-[(S,S)-teth-MsDpen RuCl]	$C_{24}H_{27}ClN_2O_2RuS$	-	18.58%	544.07
C1-351	C4-[(R,R)-teth-MsDpen RuCl]	$C_{25}H_{29}ClN_2O_2RuS$	-	18.11%	558.10
C1-361	C4-[(S,S)-teth-MsDpen RuCl]	$C_{25}H_{29}ClN_2O_2RuS$	-	18.11%	558.10

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-308	C3-[(R,R)-teth-TrisDpen RuCl]	$C_{38}H_{47}ClN_2O_2RuS$	-	13.80%	732.38
C1-318	C3-[(S,S)-teth-TrisDpen RuCl]	$C_{38}H_{47}ClN_2O_2RuS$	-	13.80%	732.38
C1-358	C4-[(R,R)-teth-TrisDpen RuCl]	$C_{39}H_{49}ClN_2O_2RuS$	-	13.54%	746.41
C1-368	C4-[(S,S)-teth-TrisDpen RuCl]	$C_{39}H_{49}ClN_2O_2RuS$	-	13.54%	746.41
C1-304	C3-[(R,R)-teth-MtsDpen RuCl]	$C_{32}H_{35}ClN_2O_2RuS$	-	15.59%	648.22
C1-314	C3-[(S,S)-teth-MtsDpen RuCl]	$C_{32}H_{35}ClN_2O_2RuS$	-	15.59%	648.22

Phosphine Ruthenium Ampy Complexes

Catalog ID	Description	Formula	CAS#	% Metal	Mol. Weight
C1-702	[(R)-Tol-Binap $RuCl_2$ Ampy]	$C_{54}H_{48}Cl_2N_2P_2Ru$	858116-31-1	10.54%	958.89
C1-712	[(S)-Tol-Binap $RuCl_2$ Ampy]	$C_{54}H_{48}Cl_2N_2P_2Ru$	857678-55-8	10.54%	958.89

CHIRAL ALCOHOLS

Chiral Alcohols

Catalog ID	Description	CAS#
CAE-001.R	(R)-1-Phenyl-ethanol	1517-69-7
CAE-001.S	(S)-1-Phenyl-ethanol	1445-91-6
CAE-002.R	(R)-1-Pyridin-2-yl-ethanol	27911-63-3
CAE-002.S	(S)-1-Pyridin-2-yl-ethanol	59042-90-9
CAE-004.R	(R)-3-Hydroxy-butyric acid ethyl ester	24915-95-5
CAE-004.S	(S)-3-Hydroxy-butyric acid ethyl ester	56816-01-4
CAE-010.S	(S)-1-(4-Bromo-phenyl)-ethanol	100760-04-1
CAE-014.R	(R)-2,2,2-Trifluoro-1-phenyl-ethanol	10531-50-7
CAE-019.RR	(R,R)-2,5-Hexanediol	17299-07-9
CAE-019.SS	(S,S)-2,5-Hexanediol	34338-96-0
CAE-020.RR	(R,R)-3,6-Octanediol	129619-37-0
CAE-020.SS	(S,S)-3,6-Octanediol	136705-66-3
CAE-023.RR	(R,R)-2,4-Pentandiol	42075-32-1
CAE-023.SS	(S,S)-2,4-Pentandiol	72345-23-4
CAE-024.R	Methyl (R)-3-Hydroxy-2-Methylpropionate	72657-23-9
CAE-024.S	Methyl (S)-3-Hydroxy-2-Methylpropionate	80657-57-4

LIGANDS

Ligands

Catalog ID	Description	Formula	CAS#	Mol. Weight
BL-101	XPhos	$C_{33}H_{49}P$	564483-18-7	476.72
BL-102	*t*BuXPhos	$C_{29}H_{45}P$	564483-19-8	424.64
BL-103	SPhos	$C_{26}H_{35}O_2P$	657408-07-6	410.53
BL-104	BrettPhos	$C_{35}H_{53}O_2P$	1070663-78-3	536.77
BL-105	*t*Bu BrettPhos	$C_{31}H_{49}O_2P$	1160861-53-9	484.69
BL-106	RuPhos	$C_{30}H_{43}O_2P$	787618-22-8	466.64
BL-107	JohnPhos	$C_{20}H_{27}P$	224311-51-7	298.4
BL-108	Cyclohexyl JohnPhos	$C_{24}H_{31}P$	247940-06-3	350.48
BL-109	DavePhos	$C_{26}H_{36}NP$	213697-53-1	393.54
BL-110	*t*BuDave Phos	$C_{22}H_{32}NP$	224311-49-3	341.47
BL-111	Me4-*t*BuXPhos	$C_{33}H_{53}P$	857356-94-6	480.75
BL-112	MePhos	$C_{25}H_{33}P$	251320-86-2	364.5
BL-113	TrixiePhos	$C_{28}H_{31}P$	255836-67-0	398.52
BL-114	JackiePhos	$C_{39}H_{37}F_{12}O_2P$	1160861-60-8	796.66
BL-115	RockPhos	$C_{31}H_{49}OP$	1262046-34-3	468.69
C4-000	(R)-PPhos	$C_{30}H_{34}N_2O_4P_2$	221012-82-4	644.64
C4-020	(S)-PPhos	$C_{30}H_{34}N_2O_4P_2$	362524-23-0	644.64
C4-002	(R)-Xyl-PPhos	$C_{46}H_{50}N_2O_4P_2$	442905-33-1	756.85
C4-022	(S)-Xyl-PPhos	$C_{46}H_{50}N_2O_4P_2$	443347-10-2	756.85
C4-005	(R)-Phanephos	$C_{40}H_{34}P_2$	364732-88-7	576.65
C4-025	(S)-Phanephos	$C_{40}H_{34}P_2$	192463-40-4	576.65
C4-007	(R)-Xyl-Phanephos	$C_{48}H_{50}P_2$	325168-89-6	688.87
C4-027	(S)-Xyl-Phanephos	$C_{48}H_{50}P_2$	325168-88-5	688.87
C4-008	(R)-An-Phanephos	$C_{44}H_{42}O_4P_2$	364732-86-5	696.75
C4-028	(S)-An-Phanephos	$C_{44}H_{42}O_4P_2$	_	696.75
C4-040	(R)-Me-Bophoz	$C_{37}H_{35}Fe\ NP_2$	406680-94-2	611.5
C4-060	(S)-Me-Bophoz	$C_{37}H_{35}Fe\ NP_2$	406681-09-2	611.5
PL-118	dtbpf	$C_{26}H_{44}FeP_2$	84680-95-5	474.42
PL-127	dcypf	$C_{52}H_{48}P_2$	146960-90-9	578.57
PL-132	Amphos	$C_{16}H_{28}NP$	932710-63-9	265.37
PL-133	Xantphos	$C_{39}H_{32}OP_2$	161265-03-8	578.62
Q Phos	Q Phos	$[(C_6H_5)_5C_5]Fe[C_5H_4(P(C_4H_9)_2)]$	312959-24-3	710.71

Pd/C
HETEROGENEOUS CATALYSTS

Heterogeneous Catalysts

Catalog ID	% Metal	Application
Palladium/Carbon		
Pd/C A402028-10	10%	Hydrogenation of alkynes, alkenes, aromatic and aliphatic nitro compounds, Hydrogenolysis, Debenzylation, C-C coupling
Pd/C 10R39	10%	Hydrogenation of alkynes, alkenes, aromatic and aliphatic nitro compounds, Hydrogenolysis, Debenzylation, C-C coupling
Pd/C 10R487	10%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Hydrodehalogenation, Dehydrogenation, Selective oxidation
Pd/C 10T755	10%	Hydrogenolysis, Debenzylation
Pd/C A405028-5	5%	Hydrogenation of alkynes, alkenes, aromatic and aliphatic nitro compounds, Hydrogenolysis, Hydrodehalogenation, Debenzylation, C-C coupling
Pd/C A405032-5	5%	Hydrogenation of alkynes, alkenes, aromatic and aliphatic nitro compounds, Hydrogenolysis, Hydrodehalogenation, Debenzylation, C-C coupling
Pd/C 5T761	5%	Hydrogenolysis, Debenzylation
Pd/C 5R39	5%	Hydrogenation of alkynes, alkenes, aromatic and aliphatic nitro compounds, Hydrogenolysis, Hydrodehalogenation, Debenzylation, C-C coupling
Pd/C 5R424	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Debenzylation, Hydrodehalogenation, Selective oxidation, Dehydrogenation, Isomerization
Pd/C A503023-5	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Debenzylation, Hydrodehalogenation, Selective oxidation, Dehydrogenation, Isomerization
Pd/C A503032-5	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Debenzylation, Hydrodehalogenation, Selective oxidation, Dehydrogenation, Isomerization
Pd/C 5R452	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Debenzylation, Hydrodehalogenation, Selective oxidation, Dehydrogenation, Isomerization
Pd/C 5R487	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Hydrodehalogenation, Rosenmund reduction, Dehydrogenation, Selective oxidation
Pd/C 5R487 Powder	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Hydrodehalogenation, Rosenmund reduction, Dehydrogenation, Selective oxidation
Pd/C A102023-5	5%	Hydrogenation of alkynes, alkenes, aromatic rings, aromatic nitro and nitroso compounds, aromatic carbonyls, imines, nitriles, Reductive amination/alkylation, Hydrogenolysis, Hydrodehalogenation, Rosenmund reduction, Dehydrogenation, Selective oxidation
Pd(S)/C A103038-5	5%	Selective hydrogenation where lower activity is required

Catalog ID	% Metal	Application
Palladium/Alumina		
Pd/Al_2O_3 A302099-5	5%	Selective hydrogenation where lower activity is required
Palladium/Calcium Carbonate		
$Pd/CaCO_3$ A303060-5	5%	Selective hydrogenation where lower activity is required
$Pd(Pb)/CaCO_3$ A305060-5	5%	Selective hydrogenation of alkynes to alkenes
Palladium/Barium Sulfate		
$Pd/BaSO_4$ A308053-5	5%	Selective hydrogenation where lower activity is required
Palladium Mixed Metal		
Pd, Pt/C E101023-4/1	4% Pd, 1% Pt	Hydrogenation of alkenes, nitro and nitroso compounds, imines, Selective oxidation
Pd, Pt/C 5R122	2.5% Pd, 2.5% Pt	Hydrogenation of alkenes, nitro and nitroso compounds, imines, Selective oxidation
Pd, Rh/C F101023-4.5/0.5	4.5% Pd, 0.5% Rh	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic nitriles, oximes
Platinum/Carbon		
Pt/C 10R128M	10%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt/C B103032-5	5%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt/C 5R18	5%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt/C 5R128M	5%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt/C B501032-5	5%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt/C B501018-5	5%	Hydrogenation of alkenes, aromatic rings, heterocyclic compounds, aromatic and aliphatic nitro and nitroso compounds, imines, nitriles, aliphatic carbonyls, Selective oxidation
Pt(S)/C B106032-5	5%	Reductive alkylation
Pt/C B103032-3	3%	Hydrogenation of halonitroaromatics
Pt/C 1R163	1%	Hydrogenation of halonitroaromatics, pyridine rings, aliphatic nitro groups

Heterogeneous Catalysts

HETEROGENEOUS CATALYSTS

Catalog ID	% Metal	Application
Platinum/Alumina		
Pt/Al_2O_3 B301099-5	5%	Selective hydrogenation, Hydrogenation of aliphatic ketones
Rhodium/Carbon		
Rh/C C101023-5	5%	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic nitro compounds, aliphatic nitriles, alkenes
Rh/C 5R594	5%	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic nitro compounds, aliphatic nitriles, alkenes
Rhodium/Alumina		
Rh/Al_2O_3 C301099-5	5%	Hydrogenation of aromatic rings, alkenes
Ruthenium/Carbon		
Ru/C D101002-5	5%	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic carbonyls, Selective oxidation
Ru/C 5R619	5%	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic carbonyls, Selective oxidation
Ruthenium/Alumina		
Ru/Al_2O_3 D302011-5	5%	Hydrogenation of aromatic rings, heterocyclic compounds, aliphatic carbonyls
Ruthenium, Palladium/ Carbon		
Ru, Pd/C 5R611	5%	Hydrogenation of aromatic rings, heterocyclic compounds

Scavenging Technologies

SCAVENGING TECHNOLOGIES

Product name	Functional group	CAS #
Smopex-101	Benzyl sulphonic acid	194498-37-8
Smopex-102	Carboxylic acid	289911-93-9
Smopex-103	Trimethyl amine	527752-26-7
Smopex-105	Vinyl pyridine	527752-99-1
Smopex-111	Thiol	536755-37-0
Smopex-112	Hydroxy thiol	887140-14-9
Smopex-234	Mercapto ethylacrylate	912338-63-7
Smopex-301	Dicyclohexyl phenyl phosphine	–
Smopex-303	Benzyl diphenyl phosphine	–
Smopex-102 Pharma grade	Carboxylic acid - pharma grade	289911-93-9
Smopex-105 Pharma grade	Vinyl pyridine - pharma grade	527752-99-1
Smopex-111 Pharma grade	Thiol - pharma grade	536755-37-0
Smopex-234 Pharma grade	Mercapto ethylacrylate - pharma grade	912338-63-7
QuadraPure-TU	Thiourea	147754-40-3
QuadraPure-AMPA	Aminomethyl phosphonic acid	1374248-78-8
QuadraPure-IDA	Imidodiacetic acid	135620-93-8
QuadraPure-BZA	Benzyl amine	–
QuadraPure-DMA	Tertiary amine	–
QuadraPure-SA	Benzyl sulphonic acid	–
QuadraPure-C	Carbon	7440-44-0
QuadraSil-AP	Amino propyl	–
QuadraSil-MP	Mercapto propyl	1225327-73-0
QuadraSil-SA	Sulphonic acid	–
QuadraSil-TA	Triamine	1187636-37-8

Revision 9/2014

Johnson Matthey

Catalysis and Chiral Technologies

USA
Johnson Matthey
2001 Nolte Drive
West Depford, NJ 08066
Tel: +1 856 384 7151
jmcct@matthey.com

France
Johnson Matthey SAS
Zl Paris Nord 2, BP 51240
95956 Roissy CGD, France
Tel: +33 1 48 17 21 91
sebastien.parisel@matthey.com

UK & Ireland
Johnson Matthey
Orchard Road, Royston, Hertfordshire
SG8 5HE UK
Tel: +44 (0) 1763 253000
jmcct@matthey.com

Benelux
Johnson Matthey SAS
Pegasuslaan 5
1831 Diegem, Belguim
Tel: +32 2 7092161
christoph.boettcher@matthey.com

Germany
Johnson Matthey
Merowingerplatz 1A
40225 Düsseldorf
Tel: +49 172 66 12 300
christoph.boettcher@matthey.com

Eastern Europe
D'Orland KEG Ltd.
Liason Office, Tr. Kpt. Jarosse 6
Brno, CZ-602 00 Brno, Czech Republic
Tel: +42 05 452 15049
christopher.kennedy@d-orland.com

Italy
Johnson Matthey
Orchard Road, Royston, Hertfordshire
SG8 5HE UK
Tel: +44 (0) 1763 253000
ilenia.gabellini@matthey.com

Spain
C.J. Chamber Hispania, S.L.
08840 Villadecans
Barcelona 08840 Spain
Tel: +34 93 6376365
cj@chambershispania.com

Switzerland
Johnson Matthey SAS
Zl Paris Nord 2, BP 51240
95956 Roissy CGD, France
Tel: +33 1 48 17 21 91
sebastien.parisel@matthey.com

Scandinavia
Johnson Matthey Finland Oy
Kauppakartanonkatu 7 A 41
FI-00930 Helsinki
Tel: +35 8500 402 837
marina.andersin@matthey.com

Korea
Johnson Matthey
Lotte Castle 101-2803
467, Gongduck-Dong, Mapo-Gu
Seoul 121-916
Tel: +82 2326 3828
sk.chung@mattheyasia.com

Israel
N. Intrater & Associates
P.O. Box 21016, 5, Lurie Street
Tel-Aviv, Israel 61210
Tel: +972 3 6292965
general@intrater.co.il

India
Johnson Matthey Chemicals India Pvt Ltd
Plot No. 6A, MIDC Industrial Estate
Taloja, Dist. Raigad, Maharashtra
41020, India
Tel: +91 22 27415 601-04
Tel: +91 22 27401 427-29
cctindia@matthey.com

China
Johnson Matthey (Shanghai)
586 Dong Xing Road
Song Jiang Industrial Zone 201613, Shanghai
China
Tel: +86 21 33528282 ext 6213
wendy.wu@mattheyasia.com.cn

Japan
Johnson Matthey Japan
Imperial Tower 14th Floor,
1-1-1 Uchisaiwai-cho
Chiyoda-ku
Tokyo 100-0011 Japan
Tel: +81 3 5511 8555
jmj-catalog@jmj.co.jp

Please refer to our website at www.jmcct.com for the latest information.