

Catalyst product guide



Johnson Matthey provides an extensive portfolio of advanced homogeneous and heterogeneous catalysts, biocatalysts, and chiral homogeneous catalysts. Our team of technical experts will deliver the solutions you need for more cost effective, efficient, and sustainable chemistry.





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Homogeneous catalysts

Palladium precursors

Product no.	Description	CAS #	Mol. weight	Reaction type
Pd-61	$\text{PdCl}_2(\text{PhCN})_2$	14220-64-5	383.57	precursor
Pd-62	$\text{PdCl}_2(\text{MeCN})_2$	14592-56-4	259.43	precursor
Pd-63	$[\text{Pd}(\text{CH}_3\text{CN})_4](\text{BF}_4)_2$	21797-13-7	444.24	precursor
Pd-70	$\text{Pd}(\text{acac})_2$	14024-61-4	304.64	precursor
Pd-90	$\text{PdCl}_2(\text{COD})$	12107-56-1	285.50	precursor
Pd-93	$\text{Pd}(\text{dba})_2$	32005-36-0	575.02	precursor
Pd-94	$\text{Pd}_2(\text{dba})_3$	51364-51-3	915.73	precursor
Pd-101	$\text{Pd}(\text{PPh}_3)_4$	14221-01-3	1155.56	Sonogashira coupling, Heck coupling
Pd-110	$[\text{Pd}(\text{allyl})\text{Cl}]_2$	12012-95-2	365.89	precursor
Pd-111	$\text{Pd}(\text{OAc})_2$	3375-31-3	224.51	precursor
Pd-116	$\text{Pd}[\text{P}(\text{tBu})_3]_2$	53199-31-8	511.06	Suzuki coupling, Heck coupling, Negishi coupling
Pd-142	$\text{PdBr}_2(\text{COD})$	12145-47-0	374.41	precursor
Pd-159	$\text{Pd}(\text{OPiv})_2$	106224-36-6	308.67	precursor
Pd-164	$[\text{Pd}(\text{crotyl})\text{Cl}]_2$	12081-22-0	393.94	precursor

Palladium coupling PdL_2X_2

Product no.	Description	CAS #	Mol. weight	Reaction type
Pd-100	$\text{PdCl}_2(\text{PPh}_3)_2$	13965-03-2	701.90	Suzuki coupling, Sonogashira coupling
Pd-106	$\text{PdCl}_2(\text{dppf}) \cdot \text{CH}_2\text{Cl}_2$	95464-05-4	816.64	Suzuki coupling, Miyaura borylation, Negishi coupling
Pd-107	$\text{PdCl}_2(\text{dppf}) \cdot (\text{CH}_3)_2\text{CO}$	851232-71-8	789.79	Suzuki coupling, Miyaura borylation, Negishi coupling
Pd-114	$\text{PdCl}_2(\text{Cy}_3\text{P})_2$	29934-17-6	738.19	Suzuki coupling, Sonogashira coupling, Heck coupling
Pd-117	$\text{PdCl}_2(\text{DPEPhos})$	205319-06-8	715.89	Suzuki coupling, Miyaura borylation, carbonylative coupling
Pd-118	$\text{PdCl}_2(\text{dtbpf})$	95408-45-0	651.75	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-119	$\text{PdCl}_2(\text{dippf})$	215788-65-1	595.65	Suzuki coupling, Miyaura borylation, Negishi coupling
Pd-122	$\text{PdCl}_2[\text{P}(\text{tBu})_2\text{Ph}]_2$	34409-44-4	621.95	Suzuki coupling, Buchwald-Hartwig amination, Sonogashira coupling
Pd-126	$\text{PdCl}_2(\text{dppp})$	59831-02-6	589.78	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-127	$\text{PdCl}_2(\text{dcypf})$	917511-90-1	755.90	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-132	$\text{PdCl}_2(\text{AmPhos})_2$	887919-35-9	708.08	Suzuki coupling, Buchwald-Hartwig amination
Pd-133	$\text{PdCl}_2(\text{dcypp})$	1041005-52-0	613.97	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-134	$\text{PdCl}_2(\text{XantPhos})$	205319-10-4	755.96	Suzuki Coupling, Heck coupling, Buchwald-Hartwig amination
Pd-166	$\text{PdCl}_2[\text{P}(\text{tBu})(\text{Cy})_2]_2$	104889-13-6	686.12	Suzuki coupling, Buchwald-Hartwig amination, Sonogashira coupling

Palladium Buchwald catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
BPC-201	XPhos Pd G2	1310584-14-5	858.90	Suzuki coupling, Negishi coupling, Heck coupling
BPC-203	SPhos Pd G2	1375325-64-6	828.79	Suzuki coupling, Negishi coupling, Heck coupling
BPC-206	RuPhos Pd G2	1375325-68-0	798.37	Suzuki coupling, Negishi coupling, Heck coupling
BPC-301	XPhos Pd G3	1445085-55-1	846.46	Suzuki coupling, Negishi coupling, Heck coupling
BPC-302	<i>t</i> BuXPhos Pd G3	1447963-75-8	882.53	Suzuki coupling, Buchwald-Hartwig amination, Negishi coupling
BPC-303	SPhos Pd G3	1445085-82-4	780.30	Suzuki coupling, Negishi coupling, Heck coupling
BPC-304	BrettPhos Pd G3	1470372-59-8	906.50	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
BPC-305	<i>t</i> BuBrettPhos Pd G3	1536473-72-9	854.43	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
BPC-306	RuPhos Pd G3	1445085-77-7	836.40	Suzuki coupling, Negishi coupling, Heck coupling
BPC-307	P(Ad) ₂ (<i>n</i> Bu) Pd G3	1651823-59-4	728.27	Suzuki coupling, Buchwald-Hartwig amination
Pd-168	P(<i>t</i> -Bu) ₃ Pd G2	1375325-71-5	512.40	Suzuki coupling, Heck coupling, Negishi coupling
Pd-179	XantPhos Pd G2	1375325-77-1	888.70	Suzuki Coupling, Heck coupling, Buchwald-Hartwig amination
Pd-183	AmPhos Pd G2	2169976-34-3	575.46	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-184	AmPhos Pd G3	1820817-64-8	635.11	Suzuki coupling, Negishi coupling, Kumada coupling
Pd-185	PCy ₃ Pd G2	1353658-81-7	590.52	Suzuki coupling, Sonogashira coupling, Heck coupling
Pd-187	XantPhos Pd G3	1445085-97-1	948.36	Suzuki Coupling, Heck coupling, Buchwald-Hartwig amination

Palladium DyadPalladates™

Product no.	Description	CAS #	Mol. weight	Reaction type
Pd-192	[HXPPhos] ₂ [Pd ₂ Cl ₆]	2548904-04-5	1381.01	Suzuki coupling, Negishi coupling, Heck coupling
Pd-193	[HRuPPhos] ₂ [Pd ₂ Cl ₆]	2548904-00-1	1360.85	Suzuki coupling, Negishi coupling, Heck coupling
Pd-194	[HSPPhos] ₂ [Pd ₂ Cl ₆]	2548904-02-3	1248.63	Suzuki coupling, Negishi coupling, Heck coupling
Pd-195	[HBrettPhos] ₂ [Pd ₂ Cl ₆]	2548904-08-9	1501.12	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
Pd-196	[H <i>t</i> BuXPhos] ₂ [Pd ₂ Cl ₆]	2548904-05-6	1276.86	Suzuki coupling, Buchwald-Hartwig amination, Negishi coupling
Pd-197	[H <i>t</i> BuBrettPhos] ₂ [Pd ₂ Cl ₆]	2548904-09-0	1396.97	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
Pd-201	[HPCy ₃] ₂ [Pd ₂ Cl ₆]	2548904-13-6	988.43	Suzuki coupling, Negishi coupling, Heck coupling
Pd-203	[HP(Ad) ₂ (<i>n</i> -Bu)] ₂ [Pd ₂ Cl ₆]	2548904-17-0	1144.66	Suzuki coupling, Negishi coupling, Heck coupling

Palladium pi-allyl complexes

Product no.	Description	CAS #	Mol. weight	Reaction type
Pd-110	[PdCl(allyl)] ₂	12012-95-2	365.89	precursor
Pd-161	AmPhos Pd(crotyl)Cl	1334497-06-1	462.35	Suzuki coupling, Negishi coupling
Pd-162	P(tBu) ₃ Pd(crotyl)Cl	1334497-00-5	399.29	Suzuki coupling, Heck coupling, Negishi coupling
Pd-170	XPhos Pd(crotyl)Cl	1798782-02-1	673.70	Suzuki coupling, Negishi coupling
Pd-171	RuPhos Pd(crotyl)Cl	1798781-96-0	663.62	Suzuki coupling, Negishi coupling, Heck coupling
Pd-172	SPhos Pd(crotyl)Cl	1798781-99-3	607.51	Suzuki coupling, Negishi coupling
Pd-173	[BrettPhos Pd(crotyl)]OTf	1798782-11-2	847.36	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
Pd-174	[tBuXPhos Pd(allyl)]OTf	1798782-25-8	721.21	Suzuki coupling, Buchwald-Hartwig amination, Negishi coupling
Pd-175	[tBuBrettPhos Pd(allyl)]OTf	1798782-15-6	781.26	Buchwald-Hartwig amination, Suzuki coupling
Pd-176	[(R)-BINAP Pd(allyl)]Cl	879689-47-1	890.56	Suzuki coupling, Negishi coupling
Pd-177	XantPhos Pd(allyl)Cl	879689-28-8	761.57	Suzuki Coupling, Heck coupling, Buchwald-Hartwig amination
Pd-178	PCy ₃ Pd(crotyl)Cl	307494-95-7	477.41	Suzuki coupling, Sonogashira coupling, Heck coupling
Pd-180	[BippyPhos Pd(allyl)]OTf	1798782-33-8	803.19	Buchwald-Hartwig amination, Suzuki coupling
Pd-181	P(o-tolyl) ₃ Pd(crotyl)Cl	1385042-42-1	501.34	Suzuki coupling, Negishi coupling
Pd-188	CyJohnPhos Pd(crotyl)Cl	692782-19-7	547.46	Suzuki coupling, Negishi coupling
Pd-189	JohnPhos Pd(crotyl)Cl	1798782-05-4	495.38	Suzuki coupling, Negishi coupling
Pd-191	[SPhos Pd(allyl)]OTf	1846557-10-5	707.09	Suzuki coupling, Negishi coupling, Heck coupling
Pd-214	[Me ₄ tBuXPhos Pd(allyl)]OTf	1798782-29-2	777.32	Buchwald-Hartwig amination, Suzuki coupling
Pd-215	[RockPhos Pd(allyl)]OTf	1798782-31-6	765.26	Buchwald-Hartwig amination, Suzuki coupling
Pd-216	[Me ₃ OMetBuXPhos Pd(allyl)]OTf	2924017-86-5	793.32	Buchwald-Hartwig amination, Suzuki coupling
Pd-217	CPhos Pd(crotyl)Cl	3105698-81-2	669.65	Buchwald-Hartwig amination, Suzuki coupling, Negishi coupling
Pd-218	[EPhos Pd(allyl)]OTf	3105698-83-4	831.37	Buchwald-Hartwig amination, Suzuki coupling
Pd-219	[GPhos Pd(allyl)]OTf	3105698-85-6	833.34	Buchwald-Hartwig amination, Suzuki coupling
Pd-220	[AlPhos Pd(allyl)]OTf	3055551-75-9	1111.63	Buchwald-Hartwig amination
Pd-221	[MorDalPhos Pd(crotyl)]OTf	3105698-87-8	760.20	Buchwald-Hartwig amination, Suzuki coupling

Iridium Noyori catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C3-020	[(R,R)-TsDPEN IrCp*Cl]	1244963-99-2	728.37	transfer hydrogenation, reductive amination
C3-021	[(R,R)-MsDPEN IrCp*Cl]	2598217-78-6	652.27	transfer hydrogenation, reductive amination
C3-022	[(1R,4S)(1R,2R)-CsDPEN IrCp*Cl]	895579-52-9	788.46	transfer hydrogenation, reductive amination
C3-030	[(S,S)-TsDPEN IrCp*Cl]	1099830-90-6	728.37	transfer hydrogenation, reductive amination
C3-031	[(S,S)-MsDPEN IrCp*Cl]	1085182-50-8	652.27	transfer hydrogenation, reductive amination
C3-032	[(1S,4R)(1S,2S)-CsDPEN IrCp*Cl]	895579-53-0	788.46	transfer hydrogenation, reductive amination

Iridium complexes

Product no.	Description	CAS #	Mol. weight	Reaction type
Ir-70	Ir(acac) ₃	15635-87-7	489.54	hydrogenation
Ir-90	[Ir(cod)py(PCy ₃)]PF ₆ (Crabtree's catalyst)	64536-78-3	804.90	hydrogenation
Ir-91	[IrCl(coe) ₂] ₂	12246-51-4	896.14	Hartwig borylation, hydrogenation, C-H activation
Ir-92	[Ir(OMe)(COD)] ₂	12148-71-9	662.87	Hartwig borylation, hydrogenation, C-H activation
Ir-93	[IrCl(COD)] ₂	12112-67-3	671.71	Hartwig borylation, hydrogenation, C-H activation
Ir-94	[Ir(COD)(phen)]Cl • THF	41396-69-4	516.06	Hartwig borylation, C-H activation
Ir-95	[Ir(COD)(Me ₄ phen)]Cl • THF	3031475-00-7	644.28	Hartwig borylation, C-H activation
Ir-97	[Ir(coe) ₂ (Me ₂ Phen)]Cl • THF	3083791-41-4	728.44	Hartwig borylation, C-H activation
Ir-98	[Ir(coe) ₂ (Me ₄ Phen)]Cl • 0.5 THF	3080504-12-4	720.44	Hartwig borylation, C-H activation
Ir-99	[Ir(coe) ₂ (Me ₂ Bpy)]Cl	3083791-40-3	704.22	Hartwig borylation, C-H activation
Ir-115	[Ir(Cp*)Cl ₂] ₂	12354-84-6	796.71	hydrogenation, asymmetric catalysis, C-H activation
Ir-116	Ir(acac)(COD)	12154-84-6	399.51	hydrogenation, asymmetric catalysis, C-H activation
Ir-118	[Ir(COD) ₂]BF ₄	35138-23-9	495.39	hydrogenation, asymmetric catalysis, C-H activation
Ir-121	[Ir(Cp*)I ₂] ₂	33040-12-9	1162.50	hydrogenation, asymmetric catalysis, C-H activation
Ir-123	Ir(C ₈ H ₁₂){PCH ₃ (C ₆ H ₅) ₂ } ₂ PF ₆	38465-86-0	845.81	hydrogenation
Ir-125	[Ir(ppy) ₂ (dtbbpy)][PF ₆]	676525-77-2	913.95	photocatalysis
Ir-126	[Ir(dF(CF ₃)ppy) ₂ (dtbbpy)][PF ₆]	870987-63-6	1121.91	photocatalysis
Ir-127	IrCl(COD)(dppe)	688063-93-6	734.38	hydrogenation

Iridium PN catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C3-101	[Ir(COD) (R)-tBu-Ox-CH ₂ (Ad ₂ P)]BARf	N/A	1605.26	asymmetric hydrogenation
C3-102	[Ir(COD) (R)-tBu-Ox-CH ₂ (Cy ₂ P)]BARf	N/A	1501.11	asymmetric hydrogenation
C3-103	[Ir(COD) (R)-tBu-Ox-CH ₂ (tBu ₂ P)]BARf	N/A	1449.34	asymmetric hydrogenation
C3-104	[Ir(COD) (R)-tBu-Ox-CH ₂ (Ph ₂ P)]BARf	1298088-46-6	1489.01	asymmetric hydrogenation
C3-111	[Ir(COD) (S)-tBu-Ox-CH ₂ (Ad ₂ P)]BARf	1186024-48-5	1605.26	asymmetric hydrogenation
C3-112	[Ir(COD) (S)-tBu-Ox-CH ₂ (Cy ₂ P)]BARf	1001318-38-2	1501.11	asymmetric hydrogenation
C3-113	[Ir(COD) (S)-tBu-Ox-CH ₂ (tBu ₂ P)]BARf	1001318-58-6	1449.34	asymmetric hydrogenation
C3-114	[Ir(COD) (S)-tBu-Ox-CH ₂ (Ph ₂ P)]BARf	1001318-74-6	1489.01	asymmetric hydrogenation
C3-120	[Ir(COD) (R)-DCP-Py-O(tBu ₂ P)]BARf	1488021-67-5	1519.08	asymmetric hydrogenation
C3-130	[Ir(COD) (S)-DCP-Py-O(tBu ₂ P)]BARf	881310-39-0	1519.08	asymmetric hydrogenation

Iridium carbene catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C3-200	[Ir(COD)(IMes)(PPh ₃)]BARf	1628471-64-6	1730.32	hydrogenation, isotopic labeling
C3-201	[Ir(COD)(IMes)Cl]	1118917-09-1	668.33	hydrogenation, isotopic labeling
C3-202	[Ir(COD)(IMes)(PPhMe ₂)]BARf	1884137-92-1	1606.18	hydrogenation, isotopic labeling

Rhodium precursors

Product no.	Description	CAS #	Mol. weight	Reaction type
Rh-92	[RhCl(nbd)] ₂	12257-42-0	461.00	hydrogenation, asymmetric catalysis, hydroformylation
Rh-93	[RhCl(COD)] ₂	12092-47-6	493.08	hydrogenation, asymmetric catalysis, hydroformylation
Rh-95	Rh(acac)(COD)	12245-39-5	310.20	hydrogenation, asymmetric catalysis, hydroformylation
Rh-96	Rh(COD) ₂ (BF ₄)	35138-22-8	406.08	hydrogenation, asymmetric catalysis, hydroformylation
Rh-97	[Rh(nbd)] ₂ BF ₄	36620-11-8	373.99	hydrogenation, asymmetric catalysis, hydroformylation
Rh-98	[Rh(COD)] ₂ CF ₃ SO ₃	99326-34-8	468.34	hydrogenation, asymmetric catalysis, hydroformylation
Rh-100	RhCl(PPh ₃) ₃ (Wilkinson's catalyst)	14694-95-2	925.23	hydrogenation, asymmetric catalysis, hydroformylation
Rh-120	[RhCl ₂ Cp*] ₂	12354-85-7	618.08	hydrogenation, asymmetric catalysis, hydroformylation
Rh-127	Rh(acac)(nbd)	32354-50-0	294.16	hydrogenation, asymmetric catalysis, hydroformylation
Rh-128	[Rh(COD)] ₂ SbF ₆	130296-28-5	555.02	hydrogenation, asymmetric catalysis, hydroformylation

Rhodium chiral catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C2-000	[Rh(COD)(R)-PPhos]BF ₄	573718-56-6	944.54	asymmetric hydrogenation
C2-010	[Rh(COD)(S)-PPhos]BF ₄	1174131-03-3	944.54	asymmetric hydrogenation
C2-020	[Rh(COD)(R)-Phanephos]BF ₄	849950-56-7	874.54	asymmetric hydrogenation
C2-030	[Rh(COD)(S)-Phanephos]BF ₄	723343-30-4	874.54	asymmetric hydrogenation
C2-040	[Rh(COD)(R)-BINAP]BF ₄	120521-81-5	920.56	asymmetric hydrogenation
C2-050	[(R)-Me-Bophoz Rh(COD)]BF ₄	1361415-92-0	909.37	asymmetric hydrogenation
C2-070	[(S)-Me-Bophoz Rh(COD)]BF ₄	1174130-89-2	909.37	asymmetric hydrogenation
C2-060	[Rh(COD)(S)-BINAP]BF ₄	208118-82-5	920.56	asymmetric hydrogenation
C7-040	[Rh((R)-BINAP) ₂] BF ₄	N/A	1435.05	isomerisation
C7-050	[Rh((S)-BINAP) ₂] BF ₄	1203947-88-9	1435.05	isomerisation

Ruthenium complexes

Product no.	Description	CAS #	Mol. weight	Reaction type
Ru-42	$\text{RuClH}(\text{CO})(\text{PPh}_3)_3$	16971-33-8	952.41	precursor, hydroformylation, hydrosilylation
Ru-43	$\text{RuClH}(\text{CO})(\text{PCy}_3)_2$	36621-70-2	726.39	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-70	$\text{Ru}(\text{acac})_3$	14284-93-6	398.40	precursor, electrochemistry
Ru-93	$\text{Ru}(\text{OAc})_2(\text{COD})$	133519-03-6	327.34	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-100	$\text{RuCl}_2(\text{PPh}_3)_3$	15529-49-4	958.85	precursor, hydrogenation
Ru-120	$[\text{RuCl}_2(\text{p-cymene})]_2$	52462-29-0	612.39	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-121	$[\text{RuI}_2(\text{p-cymene})]_2$	90614-07-6	978.20	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-122	$[\text{RuCl}_2(\text{mesitylene})]_2$	52462-31-4	584.34	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-123	$[\text{RuCl}_2(\text{Benzene})]_2$	37366-09-9	500.18	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-124	$\text{Ru}(2\text{-Me-allyl})_2(\text{COD})$	12289-94-0	319.45	precursor, asymmetric hydrogenation, transfer hydrogenation
Ru-132	$(\text{RuCl}_2\text{Cp}^*)_n$	96503-27-4	307.20	cycloaddition, polymerisation
Ru-135	$\text{RuClCp}^*(\text{PPh}_3)_2$	92361-49-4	796.33	cycloaddition, polymerisation
Ru-139	$[\text{Ru}(\text{bpy})_3][\text{Cl}]_2 \cdot 6\text{H}_2\text{O}$	50525-27-4	748.62	photocatalysis
Ru-140	$[\text{Ru}(\text{bpy})_3][\text{PF}_6]_2$	60804-74-2	859.55	photocatalysis
C1-700	$\text{Ru}(\text{OAc})_2(\text{PPh}_3)_2$	40780-26-5	743.74	precursor, asymmetric hydrogenation, transfer hydrogenation
C1-701	Triphos-Ru(OAc) ₂	1519935-87-5	843.82	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation
C1-730	Dichlorobis(2-(diphenylphosphino)ethylamine)ruthenium(II)	506417-41-0	630.49	hydrogenation, ester hydrogenation

Ruthenium Baratta catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C1-720	$(\text{dppf})\text{RuCl}_2(\text{AMPY})$	1287255-62-2	834.49	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation
Ru-721	$(\text{dppb})\text{RuCl}_2(\text{AMPY})$	1287255-62-2	834.49	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation

Ruthenium Gusev™ catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C1-750	$\text{RuCl}_2\text{SNHS}(\text{Et})\text{PPh}_3$	1462397-86-9	627.63	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation
C1-751	$\text{Ru}(\text{OAc})_2(\text{SNS})(\text{PPh}_3)$	3099288-25-9	674.82	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation
C1-850	$\text{RuCl}_2(\text{Pyr})\text{NHPPH}_2\text{PPh}_3$	1388712-91-1	754.63	hydrogenation, ester hydrogenation, dehydrogenation, borrowing hydrogen, depolymerisation

Ruthenium BINAP complexes

Product no.	Description	CAS #	Mol. weight	Reaction type
C1-333	(R)-XylBINAP Ru(OAc) ₂	374067-50-2	954.06	transfer hydrogenation, reductive amination
C1-334	(R)-BINAP Ru(OAc) ₂	104621-48-9	841.83	transfer hydrogenation, reductive amination
C1-335	((R)-Xyl-Diox-BIPHEP) Ru(OAc) ₂	944450-49-1	941.94	transfer hydrogenation, reductive amination
C1-343	(S)-XylBINAP Ru(OAc) ₂	374067-49-9	954.06	transfer hydrogenation, reductive amination
C1-344	(S)-BINAP Ru(OAc) ₂	104713-03-3	841.83	transfer hydrogenation, reductive amination
C1-345	((S)-Xyl-Diox-BIPHEP) Ru(OAc) ₂	944450-50-4	941.94	transfer hydrogenation, reductive amination
C1-420	(R)-BINAP RuCl ₂ (R,R)-DPEN	212143-23-2	1006.94	asymmetric hydrogenation
C1-422	(R)-Xyl-BINAP RuCl ₂ (R,R)-DPEN	220114-38-5	1119.15	asymmetric hydrogenation
C1-430	(S)-BINAP RuCl ₂ (S,S)-DPEN	329736-05-2	1006.94	asymmetric hydrogenation
C1-432	(S)-Xyl-BINAP RuCl ₂ (S,S)-DPEN	220114-03-4	1119.15	asymmetric hydrogenation
Ru-137	[(S)-BINAP RuCl(p-cymene)]Cl	130004-33-0	928.88	asymmetric hydrogenation, reductive amination
Ru-138	[(R)-BINAP RuCl(p-cymene)]Cl	145926-28-9	928.88	asymmetric hydrogenation, reductive amination

Ruthenium Noyori catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C1-000	[(R,R)-TsDPEN Ru(p-cymene)Cl]	192139-92-7	636.20	transfer hydrogenation, reductive amination
C1-001	[(R,R)-MsDPEN Ru(p-cymene)Cl]	1097730-63-6	560.11	transfer hydrogenation, reductive amination
C1-007	[(1S,2S)(1S,4R)-CsDPEN Ru(p-cymene)Cl]	3067212-22-7	696.31	transfer hydrogenation, reductive amination
C1-008	[(R,R)-FsDPEN Ru(p-cymene)Cl]	1026995-71-0	712.13	transfer hydrogenation, reductive amination
C1-010	[(S,S)-TsDPEN-Ru(p-cymene)Cl]	192139-90-5	636.20	transfer hydrogenation, reductive amination
C1-011	[(S,S)-MsDPEN-Ru(p-cymene)Cl]	329371-25-7	560.11	transfer hydrogenation, reductive amination
C1-017	[(1R,2R)(1R,4S)-CsDPEN Ru(p-cymene)Cl]	N/A	696.31	transfer hydrogenation, reductive amination
C1-018	[(S,S)-FsDPEN Ru(p-cymene)Cl]	1026995-72-1	712.13	transfer hydrogenation, reductive amination
C1-020	[(R,R)-TsDPEN Ru(mesitylene)Cl]	174813-82-2	622.18	transfer hydrogenation, reductive amination
C1-030	[(S,S)-TsDPEN Ru(mesitylene)Cl]	174813-81-1	622.18	transfer hydrogenation, reductive amination
C1-100	[(R,R)-TsDACH Ru(p-cymene)Cl]	213603-12-4	538.11	transfer hydrogenation, reductive amination
C1-110	[(S,S)-TsDACH Ru(p-cymene)Cl]	192057-12-8	538.11	transfer hydrogenation, reductive amination

Ruthenium Wills catalysts

Product no.	Description	CAS #	Mol. weight	Reaction type
C1-300	C3-[(R,R)-teth-TsDPEN RuCl]	1182620-83-9	620.17	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-304	C3-[(R,R)-teth-MtsDPEN RuCl]	162123-45-0	648.22	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-308	C3-[(R,R)-teth-TrisDPEN RuCl]	1629123-54-1	732.38	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-309	C3-[(R,R)-teth-TsDPEN RuCl] dimer	851051-42-8	1386.18	transfer hydrogenation, reductive amination
C1-310	C3-[(S,S)-teth-TsDPEN RuCl]	851051-43-9	620.17	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-314	C3-[(S,S)-teth-MtsDPEN RuCl]	1630734-19-8	648.22	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-318	C3-[(S,S)-teth-TrisDPEN RuCl]	1630734-20-1	732.38	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-319	C3-[(S,S)-teth-TsDPEN RuCl] dimer	851136-36-2	1386.18	transfer hydrogenation, reductive amination
C1-358	C4-[(R,R)-teth-TrisDPEN RuCl]	1629123-68-7	746.40	transfer hydrogenation, reductive amination, asymmetric hydrogenation
C1-368	C4-[(S,S)-teth-TrisDPEN RuCl]	1630736-02-5	746.40	transfer hydrogenation, reductive amination, asymmetric hydrogenation

Nickel complexes

Product no.	Description	CAS #	Mol. weight	Reaction type
Ni-103	NiCl ₂ (dppe)	14647-23-5	528.02	Suzuki coupling, Miyaura borylation
Ni-107	NiCl ₂ (dppf)	67292-34-6	683.98	Suzuki coupling, Miyaura borylation
Ni-114	NiCl ₂ (PCy ₃) ₂	19999-87-2	690.46	Suzuki coupling, Miyaura borylation
Ni-126	NiCl ₂ (dppp)	15629-92-2	542.05	Suzuki coupling, Miyaura borylation
Ni-127	NiCl ₂ (dcypf)	917511-89-8	708.18	Suzuki coupling, Miyaura borylation
Ni-128	NiCl ₂ (PPh ₃) ₂	14264-16-5	654.17	Suzuki coupling, Miyaura borylation
Ni-129	Ni(COD) ₂	1295-35-8	275.06	Suzuki coupling, Miyaura borylation
Ni-130	[(TMEDA)Ni(<i>o</i> -tolyl)Cl]	1702744-45-3	301.48	Suzuki coupling, Miyaura borylation, photocatalysis
Ni-131	Ni(COD)(DQ)	40759-64-6	331.08	Suzuki coupling, Miyaura borylation, photocatalysis
Ni-133	NiCl ₂ (dtbbpy)	1034901-50-2	398.0	photocatalysis

Heterogeneous catalysts

Palladium on carbon

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R39	5% Pd/C	Eggshell	Unreduced	18 µm	hydrogenation of aldehydes, ketones, and nitro groups, debenzylation, proto dehalogenation
5R58	5% Pd/C	Intermediate	Reduced	30 µm	hydrogenation of nitriles
5R87L	5% Pd/C	Intermediate	Reduced	18 µm	hydrogenation of aromatic ring and ketones
5R424	5% Pd/C	Eggshell	Unreduced	25 µm	hydrogenation of heterocycles, alkenes, alkynes, and nitro groups, debenzylation, proto dehalogenation
5R452	5% Pd/C	Eggshell	Unreduced	25 µm	hydrogenation of alkenes, alkynes, carbonyls, nitro groups, and nitriles, transfer hydrog., debenzylation, proto dehalog.
5R487	5% Pd/C	Intermediate	Reduced	35 µm	hydrogenation of aromatic ring, alkenes, aldehyde, and ketones, transfer hydrogenation, proto dehalog.
A102023-5	5% Pd/C	Uniform	Reduced	25 µm	hydrogenation of aromatic ring, heterocycles, alkenes, and ketones, transfer hydrogenation
A405028-5	5% Pd/C	Eggshell	Unreduced	25 µm	hydrogenation of alkenes, alkynes, aldehydes, and nitro group, debenzylation
A503023-5	5% Pd/C	Eggshell	Reduced	25 µm	hydrogenation of alkenes, alkynes, aldehydes, carbonyls, ketones, and nitro groups, transfer hydrogenation
A503032-5	5% Pd/C	Eggshell	Reduced	20 µm	hydrogenation of nitro group and nitriles
10R39	10% Pd/C	Eggshell	Unreduced	18 µm	hydrogenation of heterocycles, debenzylation
10R87L	10% Pd/C	Intermediate	Reduced	18 µm	dehydrogenation of cyclohexane
10R424	10% Pd/C	Eggshell	Unreduced	25 µm	hydrogenation of heterocycles
10R487	10% Pd/C	Intermediate	Reduced	35 µm	transfer hydrogenation
A402028-10	10% Pd/C	Eggshell	Unreduced	25 µm	hydrogenation of heterocycles, debenzylation
A402032-10	10% Pd/C	Eggshell	Unreduced	20 µm	hydrogenation of heterocycles, debenzylation

Palladium on alumina

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R325	5% Pd/Al ₂ O ₃	Uniform	Reduced	50 µm	hydrogenation of alkenes
A302011-5	5% Pd/Al ₂ O ₃	Uniform	Reduced	50 µm	hydrogenation of alkenes

Palladium on calcium carbonate

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
A303060-5	5% Pd/CaCO ₃	Uniform	Reduced	2 µm	hydrogenation of alkenes and alkynes
A305060-5	5% Pd(Pb)/CaCO ₃	Uniform	Reduced	2 µm	hydrogenation of alkynes
A306060-5	5% Pd(Pb)/CaCO ₃	Uniform	Reduced	2 µm	hydrogenation of alkynes
A310050-5	5% Pd(Pb)/CaCO ₃	Uniform	Reduced	2 µm	hydrogenation of alkynes
A326050-5	5% Pd(Pb)/CaCO ₃	Uniform	Reduced	2 µm	hydrogenation of alkynes

Palladium on barium sulfate

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
A308053-5	5% Pd/BaSO ₄	Uniform	Reduced	1 µm	proto hydrogenation
5R29A	5% Pd/BaSO ₄	Uniform	Unreduced	1 µm	proto hydrogenation

Platinum on carbon

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
1R128M	5% Pt/C	Intermediate	Reduced	35 µm	hydrogenation of nitro group
5R103	5% Pt/C	Intermediate	Reduced	20 µm	hydrogenation of nitriles
5R117	5% Pt/C	Intermediate	Reduced	18 µm	hydrogenation of nitro group
5R128M	5% Pt/C	Intermediate	Reduced	35 µm	hydrogenation of heterocycles, alkenes, aldehydes, carbonyls, ketones, nitro group, dehydrogenation of alcohol
B103018-5	5% Pt/C	Uniform	Reduced	30 µm	hydrogenation of aldehydes
B103032-5	5% Pt/C	Uniform	Reduced	20 µm	hydrogenation of heterocycles, alkenes, aldehydes, carbonyls, ketones, nitro group
B106032-5	5% Pt(S)/C	Uniform	Reduced	20 µm	hydrogenation of nitro group
1R163	1% Pt(Fe)/C	Uniform	Reduced	25 µm	hydrogenation of nitro group
5R163	5% Pt(Fe)/C	Uniform	Reduced	25 µm	hydrogenation of nitro group

Platinum on alumina

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
B312099-5	5% Pt/Al ₂ O ₃	Uniform	Reduced	12 µm	hydrogenation of aromatic ring, aldehydes, ketones, nitro group

Rhodium on carbon

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R20D	5% Rh/C	Intermediate	Reduced	18 µm	hydrogenation of aromatic ring, aniline, heterocycles, nitriles
C101023-5	5% Rh/C	Uniform	Reduced	25 µm	hydrogenation of aromatic ring, aniline, heterocycles, nitriles

Rhodium on alumina

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R524	5% Rh/Al ₂ O ₃	Uniform	Reduced	50 µm	hydrogenation of aromatic ring
C301099-5	5% Rh/Al ₂ O ₃	Uniform	Reduced	12 µm	hydrogenation of aromatic ring

Ruthenium on carbon

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R619	5% Ru/C	Eggshell	Unreduced	25 µm	hydrogenation of aromatic ring, aldehydes, ketones
D101002-5	5% Ru/C	Uniform	Reduced	25 µm	hydrogenation of aromatic ring, alcohols

Ruthenium on alumina

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
D302011-5	5% Ru/Al ₂ O ₃	Uniform	Reduced	50 µm	hydrogenation of aromatic ring

Mixed metal catalysts

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
5R122	2.5% Pd, 2.5% Pt/C	Uniform	Reduced	25 µm	dehydrogenation of alcohol
5R430	4% Pd, 1% Pt/C	Uniform	Reduced	15 µm	dehydrogenation of alcohol
E101023-4/1	4% Pd, 1% Pt/C	Uniform	Reduced	25 µm	dehydrogenation of alcohol
F101023-4.5/0.5	4.5% Pd, 0.5% Rh/C	Uniform	Reduced	25 µm	dehydrogenation of aromatic ring, alkenes, aldehydes, ketones, nitriles
5R611	5% Ru, 0.25% Pd/C	Uniform	Reduced	25 µm	hydrogenation of aromatic ring, proto dehalogenation

Flow chemistry catalysts

Product no.	Description	Metal location	Metal state	Avg. particle size	Reaction type
Cataflo Pd1	5% Pd/C	Eggshell	Reduced	500 µm	hydrogenation, hydrogenolysis
Cataflo Pd2	5% Pd/C	Eggshell	Reduced	500 µm	hydrogenation, hydrogenolysis
Cataflo Pd3	5% Pd/C	Eggshell	Reduced	200 µm	hydrogenation, hydrogenolysis
Cataflo Pd4	3% Pd/Al ₂ O ₃	Eggshell	Reduced	0.8 mm	hydrogenation, hydrogenolysis
Cataflo Pd5	3% Pd/Al ₂ O ₃	Eggshell	Reduced	0.8 mm	hydrogenation, hydrogenolysis
Cataflo Pd6	3% Pd/Al ₂ O ₃	Eggshell	Reduced	250 µm	hydrogenation, hydrogenolysis
Cataflo Pt1	3% Pt/C	Eggshell	Reduced	500 µm	selective hydrogenation, dehydrogenation
Cataflo Pt2	3% Pt/Al ₂ O ₃	Eggshell	Reduced	0.8 mm	selective hydrogenation, dehydrogenation

Please note we have additional products in our portfolio to ensure the best performance for your application. We also have the capabilities to custom design and manufacture a catalyst for your project.

Biocatalysts

Product no.	Description	Cofactor	Cofactor regeneration	Optimal pH	Reaction type
ADH-19	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-7.5	reduction of aldehydes, isometric reduction of ketones
ADH-20	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-6.5	reduction of aldehydes, isometric reduction of ketones
ADH-27	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-61	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-62	Alcohol dehydrogenase enzyme	NADP+	GDH	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-101	Alcohol dehydrogenase enzyme	NADP+	GDH, isopropanol	6.5-7.5	reduction of aldehydes, isometric reduction of ketones
ADH-104	Alcohol dehydrogenase enzyme	NAD+	GDH, FDH	6.0-6.5	reduction of aldehydes, isometric reduction of ketones
ADH-105	Alcohol dehydrogenase enzyme	NAD+	GDH, FDH, isopropanol	6.0-7.0	reduction of aldehydes, isometric reduction of ketones
ADH-110	Alcohol dehydrogenase enzyme	NADP+	GDH, isopropanol	6.5-7.5	reduction of aldehydes, isometric reduction of ketones
ADH-150	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.5-9.5	reduction of aldehydes, isometric reduction of ketones
ADH-153	Alcohol dehydrogenase enzyme	NADP+	GDH	6.0-9.5	reduction of aldehydes, isometric reduction of ketones
ADH-159	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH	6.0-9.5	reduction of aldehydes, isometric reduction of ketones
ADH-160	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-9.5	reduction of aldehydes, isometric reduction of ketones
ADH-171	Alcohol dehydrogenase enzyme	NADP+	GDH	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-220	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-230	Alcohol dehydrogenase enzyme	NADP+, NAD+	GDH, FDH, isopropanol	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
ADH-244	Alcohol dehydrogenase enzyme	NADP+	GDH, isopropanol	6.0-9.0	reduction of aldehydes, isometric reduction of ketones
AlaDH-6	Alanine dehydrogenase enzyme	NADH	GDH	6.0-9.0	Reductive amination of pyruvate, transaminase equilibrium shift
AmdH-1	Amine dehydrogenase enzyme	NAD+	GDH	9.0-10.0	asymmetric reduction of ketones
AmdH-2	Amine dehydrogenase enzyme	NAD+	GDH	9.0-10.0	asymmetric reduction of ketones
AmdH-3	Amine dehydrogenase enzyme	NAD+	GDH	9.0-10.0	asymmetric reduction of ketones
AmdH-4	Amine dehydrogenase enzyme	NAD+	GDH	9.0-10.0	asymmetric reduction of ketones
ENE-101	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	6.5-8.0	reduction of alkenes
ENE-102	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	7.0-7.5	reduction of alkenes
ENE-103	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	7.0-7.5	reduction of alkenes
ENE-105	ENE reductase enzyme	NADP+	GDH	6.0-9.0	reduction of alkenes
ENE-107	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	6.0-9.5	reduction of alkenes
ENE-108	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	6.5-9.0	reduction of alkenes
ENE-109	ENE reductase enzyme	NADP+, NAD+	GDH, FDH	6.0-8.5	reduction of alkenes
EST-112	Esterase			7.0	enantioselective ester hydrolysis
FDH-102	Formate dehydrogenase enzyme	NAD+		6.0-9.0	formate oxidation, cofactor recycling
GDH-5	Glucose dehydrogenase enzyme	NADP+, NAD+		6.5-9.0	glucose oxidation, cofactor recycling
GDH-8	Glucose dehydrogenase enzyme	NADP+		9.0-12.0	glucose oxidation, cofactor recycling
GDH-101	Glucose dehydrogenase enzyme	NADP+, NAD+		6.0-9.0	glucose oxidation, cofactor recycling
IRED-1	Imine reductase enzyme	NADP+	GDH	7.0-8.5	imine reduction, reductive amination

Product no.	Description	Cofactor	Cofactor regeneration	Optimal pH	Reaction type
IRED-3	Imine reductase enzyme	NADP+	GDH	7.0-8.5	imine reduction, reductive amination
IRED-17	Imine reductase enzyme	NADP+	GDH	7.0-8.5	imine reduction, reductive amination
IRED-18	Imine reductase enzyme	NADP+	GDH	7.0-8.0	imine reduction, reductive amination
IRED-33	Imine reductase enzyme	NADP+	GDH	7.0-8.5	imine reduction, reductive amination
IRED-44	Imine reductase enzyme	NADP+	GDH	7.0-8.5	imine reduction, reductive amination
IRED-49	Imine reductase enzyme	NADP+	GDH	8.0-8.5	imine reduction, reductive amination
IRED-69	Imine reductase enzyme	NADP+	GDH	6.0-7.5	imine reduction, reductive amination
IRED-72	Imine reductase enzyme	NADP+	GDH	8.0-9.0	imine reduction, reductive amination
LDH-4	Lactate dehydrogenase enzyme	NADH	GDH	6.0-9.0	pyruvate reduction, transaminase equilibrium shift
NR-5	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-14	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-20	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-23	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-24	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-36	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-48	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
NR-55	Nitro reductase enzyme	NADP+	GDH, ADH	7.0-8.0	aromatic nitro reduction
RTA-25	R-Transaminase enzyme	PLP	IPA and D-Alanine	6.5-10.0	reductive amination
RTA-40	R-Transaminase enzyme	PLP	D-Alanine	7.0-8.0	reductive amination
RTA-45	R-Transaminase enzyme	PLP	IPA and D-Alanine	6.5-7.5	reductive amination
RTA-57	R-Transaminase enzyme	PLP	IPA and D-Alanine	6.0-7.0	reductive amination
RTA-58	R-Transaminase enzyme	PLP	D-Alanine	7.5-8.0	reductive amination
RTA-102	R-Transaminase enzyme	PLP	IPA and D-Alanine	7.0-7.5	reductive amination
RTA-103	R-Transaminase enzyme	PLP	IPA and D-Alanine	7.5-8.0	reductive amination
RTA-104	R-Transaminase enzyme	PLP	IPA and D-Alanine	7.5-8.5	reductive amination
RTA-105	R-Transaminase enzyme	PLP	IPA and D-Alanine	7.0-8.0	reductive amination
RTA-194	R-Transaminase enzyme	PLP	IPA and D-Alanine	7.0-8.0	reductive amination
STA-1	S-Transaminase enzyme	PLP	IPA and L-Alanine	8.0-9.0	reductive amination
STA-2	S-Transaminase enzyme	PLP	IPA and L-Alanine	6.5-7.5	reductive amination
STA-13	S-Transaminase enzyme	PLP	IPA and L-Alanine	6.0-8.5	reductive amination
STA-14	S-Transaminase enzyme	PLP	IPA and L-Alanine	6.5-10.0	reductive amination
STA-113	S-Transaminase enzyme	PLP	IPA and L-Alanine	8.0-8.5	reductive amination
STA-118	S-Transaminase enzyme	PLP	IPA and L-Alanine	8.5-9.0	reductive amination
STA-120	S-Transaminase enzyme	PLP	IPA and L-Alanine	8.0-8.5	reductive amination
STA-121	S-Transaminase enzyme	PLP	IPA and L-Alanine	8.0-8.5	reductive amination

Chiral ligands

Product no.	Description	CAS #	Mol. weight	Reaction type
C4-000	(R)-PPhos	221012-82-4	644.64	asymmetric hydrogenation
C4-020	(S)-PPhos	362524-23-0	644.64	asymmetric hydrogenation
C4-005	(R)-Phanephos	364732-88-7	576.64	asymmetric hydrogenation
C4-025	(S)-Phanephos	192463-40-4	576.64	asymmetric hydrogenation
C4-007	(R)-Xyl-Phanephos	325168-89-6	688.86	asymmetric hydrogenation
C4-027	(S)-Xyl-Phanephos	325168-88-5	688.86	asymmetric hydrogenation
C4-040	(R)-Me-Bophoz	1164275-44-8	611.47	asymmetric hydrogenation
C4-060	(S)-Me-Bophoz	905857-95-6	611.47	asymmetric hydrogenation
C4-045	(R)-H-[P(R)-H8-BINOL]-BoPhoz	N/A	735.63	asymmetric hydrogenation
C4-065	(S)-H-[P(S)-H8-BINOL]-BoPhoz	N/A	735.63	asymmetric hydrogenation

Metal scavengers

Product no.	Description	Particle size distribution	Functional group	Mode of action
QP-TU	QuadraPure™ TU	400-600 µm	Thiourea	Complexation/ligand exchange
QS-MP(I)	QuadraSil™ MP (I)	75-210 µm	Mercapto	Complexation/ligand exchange

Catalyst kits

Homogeneous catalyst kits

Product no.	Description
HMK-003	Buchwald kit
HMK-004	Pi-allyl palladium kit
HMK-005	DyadPalladate™ kit
CSP-001	HTE screening plate C-C coupling
CSP-002	HTE screening plate C-N coupling
CRK-001	Ruthenium Noyori transfer hydrogenation kit
CRK-002	Iridium Noyori transfer hydrogenation kit
CRK-003	Ruthenium Wills transfer hydrogenation kit
CRK-004	Ruthenium asymmetric hydrogenation kit
CRK-005	Rhodium asymmetric hydrogenation kit
CRK-006	Ruthenium Gusev™ kit
CRK-007	Iridium PN asymmetric hydrogenation kit

Heterogeneous catalyst kits

Product no.	Description
S7022	Heterogeneous catalyst kit (32 samples)
CATFLO.DEV	Cataflo™ catalyst kit - flow chemistry

Biocatalyst kits

Product no.	Description
EZK000	Custom enzyme kit
EZK002	C=C double bond reduction kit
EZK003	C=O reduction kit
EZK004	Chiral amines kit
EZK005	Nitroreductase kit
ENZCAT	Cataplatta™ HTE screening plate - alcohol dehydrogenase
ENZCAT	Cataplatta™ HTE screening plate - ene reductase
ENZCAT	Cataplatta™ HTE screening plate - imine reductase
ENZCAT	Cataplatta™ HTE screening plate - (R)-transaminase
ENZCAT	Cataplatta™ HTE screening plate - (S)-transaminase

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Process optimisation

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