

Chemical Structure	Product & CAS#	Product Description	Sigma-Aldrich Product#
	C823 [172222-30-9] View/Print Label License View/Print MSDS	Grubbs First Generation Catalyst C₄₃H₇₂Cl₂P₂Ru FW 822.95 Ruthenium, dichloro(phenylmethylene)bis (tricyclohexylphosphine)	579726
	C848 [246047-72-3] View/Print Label License View/Print MSDS	Grubbs Second Generation Catalyst C₄₆H₆₅Cl₂N₂PRu FW 848.97 Ruthenium, [1,3-bis-(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro (phenylmethylene) (tricyclohexylphosphine)	569747
	C601 [203714-71-0] View/Print Label License View/Print MSDS	Hoveyda-Grubbs First Generation Catalyst C₂₈H₄₅Cl₂OPRu FW 600.61 Ruthenium, dichloro[[2-(1-methylethoxy)phenyl]methylene](tricyclohexylphosphine)	577944
	C627 [301224-40-8] View/Print Label License View/Print MSDS	Hoveyda-Grubbs Second Generation Catalyst C₃₁H₃₈Cl₂N₂ORu FW 626.62 Ruthenium, [1,3-bis(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro[[2-(1-methylethoxy)phenyl]methylene]	569755
	C571 [927429-61-6] View/Print Label License View/Print MSDS	C₂₇H₃₀Cl₂N₂ORu FW 570.52 [1,3-Bis(2-methylphenyl)-2-imidazolidinylidene]dichloro(2-isopropoxyphenylmethylene)ruthenium(II)	682373
	C598 [802912-44-3] View/Print Label License View/Print MSDS	C₂₉H₃₅Cl₂N₃Ru FW 597.58 1,3-Bis(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro[3-(2-pyridinyl-κN)propylidene-κC]ruthenium(II)	682381

The catalysts shown above are made and sold under one or more of U.S. Patent Nos. 5,969,170, 6,111,121, 6,759,537, 6,921,735, 7,329,758, 7,365,140, patents pending, and associated foreign equivalents. Use of these catalysts may be subject to these and other patents and patents pending. Research quantities of these catalysts are available exclusively through Sigma-Aldrich (800-558-9160; www.sigma-aldrich.com) and are subject to the label licenses linked above. Please review the appropriate label license before purchasing catalyst.

Development and commercial quantities of catalysts as well as licenses are available directly from Materia. Please direct your inquiries to Materia at (626) 584-8400 or info@materia-inc.com.

Metathesis Catalysts (Cont.)



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	C793 [927429-60-5] View/Print Label License View/Print MSDS	C₄₂H₅₇Cl₂N₂PRu FW 792.87 [1,3-Bis(2-methylphenyl)-2-imidazolidinylidene]dichloro(benzylidene) (tricyclohexylphosphine)ruthenium(II)	682284
	C801 [194659-03-9] View/Print Label License View/Print MSDS	C₄₁H₇₄Cl₂P₂Ru FW 800.95 Dichloro(3-methyl-2-butenylidene)bis(tricyclohexylphosphine)ruthenium(II)	578681
	C827 [253688-91-4] View/Print Label License View/Print MSDS	C₄₄H₆₇Cl₂N₂PRu FW 826.97 [1,3-Bis(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro(3-methyl-2-butenylidene) (tricyclohexylphosphine)ruthenium(II)	682365
	C884 [900169-53-1] View/Print Label License View/Print MSDS	C₃₈H₄₀Br₂Cl₂N₄Ru FW 884.53 [1,3-Bis(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro(benzylidene)bis(3-bromopyridine)ruthenium(II)	682330
	C833 [1020085-61-3] View/Print Label License View/Print MSDS	Piers First Generation Catalyst C₃₇H₆₇BCl₂F₄P₂Ru FW 832.66 Ruthenium(1+), dichloro(tricyclohexylphosphine)[(tricyclohexylphosphoranylidene) methyl]-, (T-4)-, tetrafluoroborate(1-):(1:1)	707961
	C859 [832146-68-6] View/Print Label License View/Print MSDS	Piers Second Generation Catalyst C₄₀H₆₀BCl₂F₄N₂PRu FW 859.68 Ruthenium, [1,3-bis(2,4,6-trimethylphenyl)-2-imidazolidinylidene]dichloro[(tricyclohexylphosphoranylidene)methyl], tetrafluoroborate	707988

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Metathesis Catalysts (Cont.)



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	C711 [635679-24-2] View/Print Label License View/Print MSDS	C₃₇H₅₀Cl₂N₂ORu FW 710.78 Ruthenium, [1,3-bis-[2,6-bis(methylethyl)phenyl]-2-imidazolidinylidene]-dichloro[[2-(1-methylethoxy-kO)phenyl]methylene-kC]	729345
	C933 [373640-75-6] View/Print Label License View/Print MSDS	C₅₂H₇₇Cl₂N₂PRu FW 933.13 Ruthenium, [1,3-bis-[2,6-bis(methylethyl)phenyl]-2-imidazolidinylidene]-dichloro(phenylmethylene)(tricyclohexylphosphine)-	729353

The catalysts shown above are made and sold under one or more of U.S. Patent Nos. 5,969,170, 6,111,121, 6,759,537, 6,921,735, 7,329,758, 7,365,140, patents pending, and associated foreign equivalents. Use of these catalysts may be subject to these and other patents and patents pending. Research quantities of these catalysts are available exclusively through Sigma-Aldrich (800-558-9160; www.sigma-aldrich.com) and are subject to the label licenses linked above. Please review the appropriate label license before purchasing catalyst.

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