

1. Record Nr.	UNINA9910460536003321
Titolo	Handbook of reagents for organic synthesis : reagents for heteroarene functionalization // edited by Andre B. Charette
Pubbl/distr/stampa	West Sussex, England : , : Wiley, , 2015 ©2015
ISBN	1-118-72657-X 1-118-72655-3
Descrizione fisica	1 online resource (829 p.)
Collana	Hdbk of Reagents for Organic Synthesis
Disciplina	547/.2
Soggetti	Organic compounds - Synthesis Heterocyclic chemistry Chemical tests and reagents Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes indexes.
Nota di contenuto	Handbook of Reagents for Organic Synthesis: Reagents for Heteroarene Functionalization; Contents; Preface; Introduction; Recent Review Articles and Monographs; Short Note on InChIs and InChIKeys; Acetic Anhydride; Acetyl Chloride; Aluminum Chloride; Aluminum Trifluoromethanesulfonate; Antimony Trifluoromethanesulfonate; Bathophenanthroline; 1,2-Benzodiazine; Benzopyrazole; Benzotriazole; Bis(allyl)di--chlorodipalladium; Bis(benzonitrile)dichloropalladium(II); Bis(dibenzylideneacetone)palladium(0); Bis(1,10-phenanthroline) palladium Hexafluorophosphate Bis[tris(1,1-dimethylethyl)-phosphine]palladiumBromine; N-Bromosuccinimide; n-Butyllithium; sec-Butyllithium; tert-Butyllithium; Butyllithium-Potassium tert-Butoxide; Cesium Acetate; N-Chlorosuccinimide; Copper(II) Acetate; Copper(II) Bromide; Copper(I) Chloride; Copper(II) Chloride; Copper(I) Iodide; Copper(II) Trifluoroacetate; Copper(II) Trifluoromethanesulfonate; N-Cyano-4-methyl-N-phenylbenzenesulfonamide; Dibenzofuran; Dibenzothiophene; 1,1-Di-tert-butyl Peroxide; Di-tert-butyl(methyl) phosphine; Di-tert-butyl(methyl)phosphonium Tetrafluoroborate;

Dichlorobis(acetonitrile) Palladium  
Dichlorobis(triphenylphosphine)-palladium(II)Di--chlorotetrakis[(1,2-  
)-cyclooctene]diiridium; Di--methoxobis(1,5-cyclooctadiene)  
diiridium(I); Dimethyl Diazomalonate; (2S,5S)-2-(1,1-Dimethylethyl)-3-  
methyl-5-(phenylmethyl)-4-imidazolidinone; Diphenyliodonium  
Hexafluorophosphate; Diphenyliodonium Triflate; Dysprosium  
Trifluoromethanesulfonate; N-fluoro-N-(phenylsulfonyl)-  
benzenesulfonamide; 1-Fluoro-2,4,6-trimethylpyridinium  
Tetrafluoroborate; Furan; Gallium(III) Trifluoromethanesulfonate  
(Gallium Triflate); Hafnium(IV) Trifluoromethanesulfonate; Hypofluorous  
Acid-Acetonitrile Complex  
Iridium(III) TriflateIndolizine; Iron, Bis(pyridine)bis(2-  
pyridinecarboxylato-N1,O2); Isoindole; Isoquinoline; Lithium t-  
Butoxide; Lithium Dichloro(1-methylethyl)-magnesate; Lithium  
Dichloro(2,2,6,6-tetramethylpiperidinato)-zincate; Magnesium tert-  
butoxide; Manganese(III) Acetate; 4-Methoxypyridine N-oxide; 6-  
Methoxyquinoline-N-oxide; 2-Methylbenzothiazole; N-  
Methylimidazole; N-Methylindole; 1-[[[(4-Methylphenyl)sulfonyl]amino]  
-pyridinium inner salt; Methyltrioxorhenium; Nitric Acid; 4,4,4,4,5,5,5,  
5-Octamethyl-2,2-bi-1,3,2-dioxaborolane; 1,2,5-Oxadiazole; Oxalyl  
Chloride-Dimethylformamide  
OxazolePalladium(II) Acetate; Palladium(II) Bromide; Palladium(II)  
Chloride; Palladium(-cinnamyl) Chloride Dimer; Palladium Pivalate;  
Pentamethylcyclopentadienylrhodium(III) chloride dimer; 1,10-  
Phenanthroline; 1,10-Phenanthroline, 1-Oxide; (1,10-Phenanthroline)  
(trifluoromethyl) (triphenylphosphine)copper; Pinacolborane; Pivalic  
Acid; Potassium Acetate; Propanoic acid, 2-Diazo-, 2-Methyl-1-(1-  
methylethyl)propyl ester; Pyridazine; Pyridazine N-Oxide; Pyridine;  
Pyridine N-Oxide; Pyrrole; Quinoline; Ruthenium Dodecacarbonyltri  
Triangulo; Scandium Trifluoromethanesulfonate; Silver(I) Acetate  
Silver(I) Carbonate

---

## Sommario/riassunto

Heteroarenes are among the most prevalent structural units in natural products, pharmaceuticals, agrochemicals, and other compounds of scientific or commercial interest. In the last decade, a broad range of novel synthetic methods has been developed to not only facilitate construction of the heteroarene motif, but to enable its modification through direct C-H functionalization. This Handbook describes 117 key reagents for selective heteroarene functionalization reactions, including both traditional and transition metal-catalyzed C-H functionalization. Since these reactions typically involve o

---