**Алматы** (7273)495-231
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**Архангельск** (8182)63-90-72
**Астрахань** (8512)99-46-04
**Барнаул** (3852)73-04-60
**Белгород** (4722)40-23-64
**Благовещенск** (4162)22-76-07
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**Владикавказ** (8672)28-90-48
**Владимир** (4922)49-43-18
**Волгоград** (844)278-03-48
**Вологда** (8172)26-41-59
**Воронеж** (473)204-51-73
**Екатеринбург** (343)384-55-89
**Иваново** (4932)77-34-06
**Ижевск** (3412)26-03-58
**Иркутск** (395)279-98-46
**Казань** (843)206-01-48
**Калининград** (4012)72-03-81
**Калуга** (4842)92-23-67
**Кемерово** (3842)65-04-62
**Киров** (8332)68-02-04
**Коломна** (4966)23-41-49
**Кострома** (4942)77-07-48
**Краснодар** (861)203-40-90
**Красноярск** (391)204-63-61
**Курск** (4712)77-13-04
**Курган** (3522)50-90-47
**Липецк** (4742)52-20-81
**Магнитогорск** (3519)55-03-13
**Москва** (495)268-04-70
**Мурманск** (8152)59-64-93
**Набережные Челны** (8552)20-53-41
**Нижний Новгород** (831)429-08-12
**Новокузнецк** (3843)20-46-81
**Ноябрьск** (3496)41-32-12
**Новосибирск** (383)227-86-73
**Омск** (3812)21-46-40
**Орел** (4862)44-53-42
**Оренбург** (3532)37-68-04
**Пенза** (8412)22-31-16
**Петрозаводск** (8142)55-98-37
**Псков** (8112)59-10-37
**Пермь** (342)205-81-47
**Ростов-на-Дону** (863)308-18-15
**Рязань** (4912)46-61-64
**Самара** (846)206-03-16
**Саранск** (8342)22-96-24
**Санкт-Петербург** (812)309-46-40
**Саратов** (845)249-38-78
**Севастополь** (8692)22-31-93
**Симферополь** (3652)67-13-56
**Смоленск** (4812)29-41-54
**Сочи** (862)225-72-31
**Ставрополь** (8652)20-65-13
**Сургут** (3462)77-98-35
**Сыктывкар** (8212)25-95-17
**Тамбов** (4752)50-40-97
**Тверь** (4822)63-31-35
**Тольятти** (8482)63-91-07
**Томск** (3822)98-41-53
**Тула** (4872)33-79-87
**Тюмень** (3452)66-21-18
**Ульяновск** (8422)24-23-59
**Улан-Удэ** (3012)59-97-51
**Уфа** (347)229-48-12
**Хабаровск** (4212)92-98-04
**Чебоксары** (8352)28-53-07
**Челябинск** (351)202-03-61
**Череповец** (8202)49-02-64
**Чита** (3022)38-34-83
**Якутск** (4112)23-90-97
**Ярославль** (4852)69-52-93

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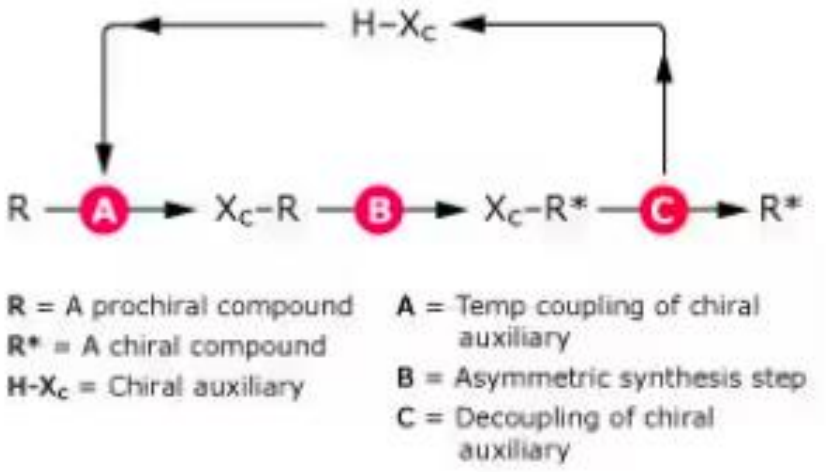
# Технические характеристики на хиральные вспомогательные вещества, реагенты для галогенирования, реагенты, образующие связь CC, цинкорганические реагенты, алюмоорганические реагенты кремнийорганические реагенты компании Sigma-Aldrich

**Виды товаров:** первичные алканы, оксазолидины, фенилы, вторичные алканы, вторичные спирты, карбаматы, эфиры карбоновых кислот, вторичные амины, третичные алканы, альдегиды, первичные амины, третичные амины, карбоновые кислоты, сульфиамиды, сульфоамиды, тиазолидины, дисиланы, силанолы, силазаны, силикаты, силоксаны и др.

# Chiral Auxiliaries




Controlling the stereochemical outcome for various synthetic routes using chiral auxiliaries enables the synthesis of many enantiomerically pure compounds in a time-efficient manner. By temporarily attaching these structures to an organic compound, the auxiliary can influence the stereoselectivity of future reactions. Once the stereoselective protection is no longer needed, the chiral auxiliary can be removed and recycled for future uses. Asymmetric synthesis plays a crucial role in the chemical production of certain therapeutic and natural product compounds in enantiomeric form. We offer a market-leading range of innovative ephedrine derivatives, oxazolidinone derivatives, and sulfur-based chiral auxiliaries to aptly suit your applications.

## EPHEDRINE DERIVATIVES FOR ASYMMETRIC SYNTHESIS

Ephedrine, as well as ephedrine isomers and derivatives, play an important role in the preparation of optically active molecules, such as phosphine-phosphonite ligands, and allow for the synthesis of new molecules with stable configurations or unique confirmations. Our ligands have a stable non-carbon stererogenic center that allow them to assume roles as catalytic agents, chiral auxiliaries, or inductors in asymmetric organic synthesis.

## OXAZOLIDINONE DERIVATIVES FOR ASYMMETRIC SYNTHESIS

Oxazolidinone derivatives have a well-established structure-activity relationship and are used in diastereoselective reactions for various asymmetric transformations. Our derivatives are frequently used in aldol, alkylation, or Diels-Alder reactions, and afterwards the steric hindrances are removed.

## SULFUR-BASED CHIRAL AUXILIARIES

Our convenient sulfur-based chiral auxiliaries are effective as stereogenic groups and can be superior to other well-known chiral auxiliaries, depending on your application. Our auxiliaries are valuable for the synthesis of natural products and compounds with pharmacological activity for acetate aldol reactions, resolution of racemic mixtures, Michael additions, and intramolecular thio-Michael/aldol cyclization cascade reactions.

8.07047

**(*S*)-(-)-1-Phenylethylamine**
for the resolution of racemates for synthesis

497401
**(*R*)-(+)-2-Methyl-2-propanesulfinamide**
98%

8.07031
**(R)-(+)-1-Phenylethylamine**
for the resolution of racemates for synthesis

513210
**(*S*)-(−)-2-Methyl-2-propanesulfinamide**
97%

134910
**(1*R*,2*S*)-(−)-Ephedrine**
98%

294640
**(*S*)-4-Benzyl-2-oxazolidinone**
99%

300977
**(*R*)-4-Benzyl-2-oxazolidinone**
99%

8.00384
**L-(-)-Malic acid**
for resolution of racemates for synthesis

317500
**(1*S*,2*R*)-(+)-Norephedrine**
98%

235210
**(1*R*,2*S*)-(−)-*N*-Methylephedrine**
99%

432741
**(*S*)-(−)-3-Boc-2,2-dimethyloxazolidine-4-carboxaldehyde**
95%

340529
**(4*S*,5*R*)-(−)-4-Methyl-5-phenyl-2-oxazolidinone**

99%

298883
**(*S*)-(−)-4-Isopropyl-2-oxazolidinone**
99%

402451
**(*R*)-(−)-4-Phenyl-2-oxazolidinone**
98%

298352
**(1*S*)-(−)-2,10-Camphorsultam**
98%

287776
**(1*S*,2*R*)-(+)-*N*-Methylephedrine**
99%

8.18531
**(2R,3R)-(+)-Tartaric acid**
for resolution of racemates for synthesis

298891
**(4*R*,5*S*)-(+)-4-Methyl-5-phenyl-2-oxazolidinone**
99%

8.22311
**(1S)-(+)-Camphor-10-sulfonic acid**
for resolution of racemates for synthesis

8.02304
**(-)-Quinine**
for resolution of racemates for synthesis

458775
**(*S*)-(+)-4-Benzyl-3-propionyl-2-oxazolidinone**
99%

42787
**(*R*)-4-Benzylthiazolidine-2-thione**
≥97.0%

462063
**(*R*)-(+)-3-Boc-2,2-dimethyloxazolidine-4-carboxaldehyde**
95%

8.00218
**(-)-Quinic acid**
for resolution of racemates for synthesis

8.24476
**(-)-Shikimic acid**
for synthesis

8.06914
**(R)-(-)-Mandelic acid**
for resolution of racemates for synthesis

8.18308
**(-)-Brucine**
for resolution of racemates for synthesis

8.00763
**D-(+)-Malic acid**
for the resolution of racemates for synthesis

8.18318
**D(-)-N-Methylglucamine**
for resolution of racemates for synthesis

658405
**(*S*)-4-(4-Aminobenzyl)-2(1*H*)-oxazolidinone**
97%

458937
**Methyl (*R*)-(+)-3-Boc-2,2-dimethyl-4-oxazolidinecarboxylate**
98%

8.02506
**(+)-Cinchonine**
for resolution of racemates for synthesis

450677
**(*S*)-(−)-4-Isopropyl-5,5-dimethyl-2-oxazolidinone**
98%

8.18725
**(2R,3R)-(-)-Di-O-4-toluoyl-L-tartaric acid**
for synthesis

450693
**(*S*)-(−)-4-Benzyl-5,5-dimethyl-2-oxazolidinone**
98%

902640
**(S)-4-Methyl-2-oxazolidinone**

469475
**(*R*)-(+)-3-(Benzyloxycarbonyl)-4-oxazolidinecarboxylic acid**
98%

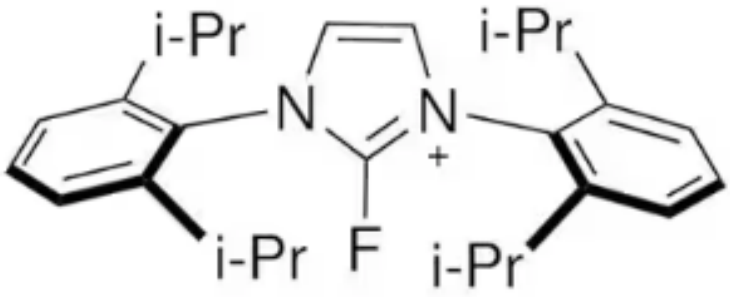
450669
**(*R*)-(+)-4-Isopropyl-5,5-dimethyl-2-oxazolidinone**
98%

8.18869
**(2S,3S)-(+)-Di-O-benzoyltartaric acid**
for resolution of racemates for synthesis

82547
**(−)-Pseudoephedrine**
purum, ≥96.0% (sum of enantiomers, GC)

421642
**(*S*)-(+)-3-Acetyl-4-benzyl-2-oxazolidinone**
99%

# Halogenation Reagents




Halogenation is fundamental tool in the organic chemist's toolbox for replacing a hydrogen atom with a halogen atom (fluorine, chlorine, bromide, or iodine). The use of halogenation reagents in various coupling protocols (e.g., Suzuki, Stille, Sonogashira) and nucleophilic substitution is prevalent and has been reported in the scientific community.

While several synthetic methods for the introduction of a halogen exist, there is still a need for efficient and practical methods for introducing other halogen-containing structural elements, in particular at a late-stage in synthesis (esp. with high yields and under mild conditions). Our readily available halogenation reagents may be used in many stages of your synthesis, and many are practical for use in late-stage development.

Our portfolio includes halogenation reagents for brominations, chlorinations, fluorinations, haloborations, and iodinations. With products such as AlkylFluor, XtalFluor®, PhenoFluor™, and PyFluor there are bench-stable reagent options for deoxyfluorination. We are dedicated to supporting all your explorations with our halogenated substrates.

235253
**(Diethylamino)sulfur trifluoride**
95%

744050
**(Difluoromethyl)trimethylsilane**
≥98.0% (GC)

431044
**(Heptafluoropropyl)trimethylsilane**
97%

728365
**1-[(Triisopropylsilyl)ethynyl]-1,2-benziodoxol-3(1*H*)-one**
≥98.0% (AT)

932043
**1-(3,3-difluoroprop-2-en-1-yl)-1-methylpiperidinium triflate**
≥95%

903132

**1-(Fluorosulfonyl)-2,3-dimethyl-1*H*-imidazol-3-ium trifluoromethanesulfonate**
≥95%

744514
**1-Chloro-1,2-benziodoxol-3(1*H*)-one**
98.0-102.0% (AT)

439312
**1-Fluoro-2,4,6-trimethylpyridinium tetrafluoroborate**
≥95%

738115
**1-Fluoro-2,4,6-trimethylpyridinium triflate**
95%

323659
**1-Fluoropyridinium triflate**
99%

157902
**1,3-Dibromo-5,5-dimethylhydantoin**
98%

8.03600
**1,3-Dibromo-5,5-dimethylhydantoin**
for synthesis

T0656
**1,3,4,6-Tetrachloro-3a,6a-diphenylglycouril**

370517
**1*H*,1*H*,2*H*,2*H*-Perfluorooctyl iodide**
96%

904848
**2-Chloro-1,3-bis(2,6-diisopropylphenyl)imidazolium chloride**
≥95%

793841
**2,2-Difluoroacetophenone**

804312
**2,2-difluoroethylamine hydrochloride**

903981
**2,3,7,8-Tetrafluorothianthrene-*S*-oxide**
≥95%

CF0043
**3,5-Bis(trifluoromethyl)benzyl azide**

901243
**4-(Acetylamino)phenyl]imidodisulfuryl difluoride**
≥98%

483869
**5-(Trifluoromethyl)dibenzothiophenium tetrafluoroborate**
97%

483877
**5-(Trifluoromethyl)dibenzothiophenium trifluoromethanesulfonate**
97%

707562
**5-Chloro-1-aza-5-stanna-bicyclo[3.3.3]undecane**

900456
**AlkylFluor**

CF0046
**Azidodifluoroacetamide**

362700
**B-Chlorocatecholborane**
97%

15220
**Bis(trifluoromethane)sulfonimide**
purum, ≥95.0% ($^{19}$F-NMR)

307629
**Boron triiodide**
95%

470864
**Bromine**
≥99.99% trace metals basis

277576

**Bromine**
ACS reagent, ≥99.5%

207888
**Bromine**
reagent grade

435937
**Cerium(IV) fluoride**
99%

C95501
**Cyanuric chloride**
99%

30471
**Davy-reagent p-tolyl**
≥97.0%

680850
**Di-(4-chlorobenzyl)azodicarboxylate**
97%

737135
**Dibromoisocyanuric acid**
96%

922668
**Dichloromeldrum's acid**
≥95%

CF0048
**Difluoroethylazide**
0.5 M in 1,2-dimethoxyethane

746061
**Difluoromethyl 2-pyridyl sulfone**
97% (HPLC)

CF0038
**Difluoromethyl azide solution**
(1.2 M in DME)

742600
**Difluoromethyl phenyl sulfone**
≥97%

CF0045
**Ethyl difluoroazidoacetate**

03002
**Iodine**
puriss., meets analytical specification of Ph. Eur., BP, USP, 99.8-100.5%

266426
**Iodine**
*ReagentPlus®*, 99.7% trace metals basis, beads, 1-3 mm

376558
**Iodine**
flakes, *ReagentPlus®*, ≥99%

326143
**Iodine**
≥99.99% trace metals basis

451045
**Iodine**
anhydrous, beads, −10 mesh, 99.999% trace metals basis

207772
**Iodine**
ACS reagent, ≥99.8%, solid

57655
**Iodine**
puriss., ≥99.5% (RT), particles (round)

8.20738
**Iodine monobromide**
for synthesis

224847
**Iodine monobromide**
98%

481556
**Iodine monochloride**
99.998% trace metals basis

402990
**Iodine monochloride**
ACS reagent, 1.10±0.1 I/Cl ratio basis

8.04771
**Iodine monochloride**
for synthesis

15-0630
**Iodine solution**
5 mM

359122
**Iodine trichloride**
97%

8.04772
**Iodine trichloride**
for synthesis

227439
**Lawesson reagent**
97%

901466
***Mes*-Umemoto reagent**
≥95%

14944
***N*-[4-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-Heptadecafluorodecyl) benzyloxycarbonyloxy]succinimide**
≥97.0% (NMR)

908487
***N*-(*tert*-butyl)-*N*-((ethoxycarbonothioyl)thio)-2,3,4,5,6-pentafluorobenzamide**
≥95%

B81255
***N*-Bromosuccinimide**
*ReagentPlus®*, 99%

109681
***N*-Chlorosuccinimide**
98%

8.02811
**N-Chlorosuccinimide**
for synthesis

392715
***N*-Fluorobenzenesulfonimide**
97%

220051
***N*-Iodosuccinimide**
95%

564990
***N*,*N*-Diethyl-1,1,2,3,3,3-hexafluoropropylamine**

689122
***O*,*O*'-1,3-Propanediylbishydroxylamine dihydrochloride**
98%

792454
**Palau'Chlor®**
95%

CF0037
**Pentafluoroethyl azide**
0.15 M in THF

226734
**Phosphorus pentabromide**
95%

288462
**Phosphorus tribromide**
≥99.99% trace metals basis

256536
**Phosphorus tribromide**
99%

157783
**Phosphorus tribromide**
97%

8.22321
**Phosphorus tribromide**
for synthesis

157791
**Phosphorus trichloride**
*ReagentPlus®*, 99%

310115
**Phosphorus trichloride**
99.999% trace metals basis

241555
**Phosphorus triiodide**
99%

376949
**Phosphorus(V) oxybromide**
>95%

8.22339
**Phosphoryl chloride**
for synthesis

804401
**PyFluor**

8.14345
**Pyridinium bromide-perbromide**
for synthesis

133248
**Pyridinium tribromide**
technical grade, 90%

922560
***S*-(Trifluoromethyl)thianthrenium triflate**
≥95%

157767
**Sulfuryl chloride**
97%

C11081
**Tetrabromomethane**
*ReagentPlus®*, 99%

CF0044
**Tetrafluoropropyl azide**
0.5 M in 1,2-dimethoxyethane

251259
**Thionyl bromide**
97%

320536

**Thionyl chloride**
reagent grade, 97%

447285
**Thionyl chloride**
*ReagentPlus®*, 99.5%, low iron

8.14371
**Triethylamine trishydrofluoride**
for synthesis

CF0036
**Trifluoromethyl azide**
0.5 M in THF

488712
**Trimethyl(trifluoromethyl)silane**
99%

752932
**Trimethylsulfonium bromide**
97%

270946
**Triphenylphosphine dibromide**
96%

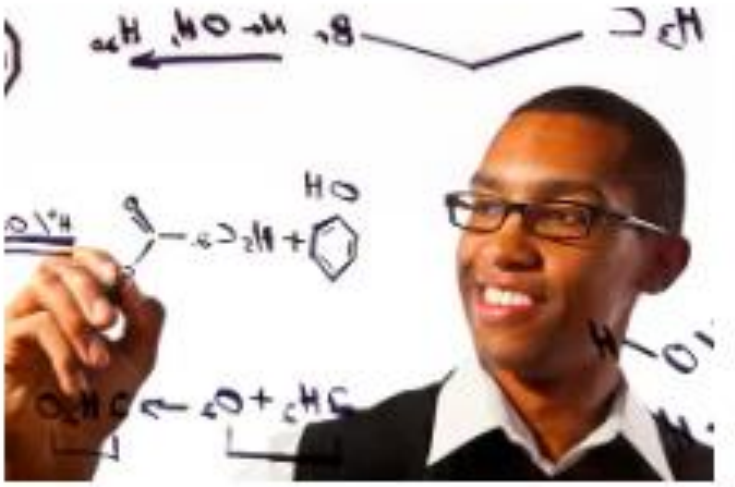
419184
**Triphenylphosphine diiodide**
technical grade, 90%

572543
**Woollins' Reagent**

719439
**XtalFluor-E®**

719447
**XtalFluor-M®**

# C–C Bond Forming Reagents



Carbon-carbon (C–C) bond formation is a fundamental transformation of synthetic organic chemistry. The ability to elaborate and extend a carbon framework via a series of C–C bond-forming reactions is paramount to medicinal chemistry, agrochemical synthesis, and natural product synthesis.

Tremendous advances have been made in the synthetic methods available for C–C bond formation due to the development of robust and reliable protocols for cross-coupling, increased accessibility to various organometallic reagents, and the creation and improvement of stoichiometric reagents which serve to place a specific carbon-containing moiety.

We have a wide breadth of powerful C–C bond-forming reagents. Our phosphonium salts are used in Wittig reactions, and phosphonates are employed in Horner-Wadsworth-Emmons (HWE) reactions to create various alkene-containing products. We have a diverse selection of reagents for trifluoromethylation and difluoromethylation, many of which can be employed under mild conditions and have broad substrate scopes. Our extensive array of palladium, ruthenium, and other metal precatalysts and catalysts are optimal for various cross-coupling reactions. Additional carbon-carbon bond-forming reagents include boronic acids and derivatives, alkynes, triflates, and halogenated substrates. In addition, we have various catalysts for olefin and alkyne metathesis available for your research.

710326
**(1,3-Dioxolan-2-ylmethyl)zinc bromide**
0.6 M in THF

ALD00574
**(1*R*,4*R*)-1-((4-(Trifluoromethyl)phenyl)sulfonyl)bicyclo[2.1.0]pentane, (-)-*R*-enantiomer**
95%

304131
**(2-Hydroxyethyl)triphenylphosphonium bromide**
97%

389196

**(3-Benzyloxypropyl)triphenylphosphonium bromide**
98%

135259
**(3-Bromopropyl)triphenylphosphonium bromide**
98%

349720
**(3-Carboxypropyl)triphenylphosphonium bromide**
98%

272132
**(4-Bromobutyl)triphenylphosphonium bromide**
98%

157945
**(4-Carboxybutyl)triphenylphosphonium bromide**
98%

922757
**(4-Chlorophenyl)(5,5-dimethyl-2-oxido-1,3,2-dioxaphosphinan-2-yl)methanone**
≥95%

269158
**(Bromomethyl)triphenylphosphonium bromide**
98%

377708
**(Carbethoxyethylidene)triphenylphosphorane**
94%

411310
**(Carbethoxymethyl-1,2-$^{13}C_2$)triphenylphosphonium bromide**
98 atom % $^{13}C$

C5106
**(Carbethoxymethylene)triphenylphosphorane**
95%

377015
**(Chloromethyl)triphenylphosphonium chloride**
97%

280909
**(Chloromethylene)dimethyliminium chloride**

95%

464937
**(Cyanomethyl)triphenylphosphonium chloride**
98%

412252
**(Ethoxycarbonylmethyl)triphenylphosphonium bromide**
98%

47718
**(Formylmethyl)triphenylphosphonium chloride**
≥97.0% (AT)

309567
**(Methoxymethyl)triphenylphosphonium chloride**
97%

ALD00612
**(*S*)-*N*-(1-(Dimethylamino)-3-phenylpropan-2-yl)acetamide**
≥95%

369047
**(*tert*-Butoxycarbonylmethyl)triphenylphosphonium bromide**
98%

369799
**(*tert*-Butoxycarbonylmethylene)triphenylphosphorane**
98%

280933
**(Triphenylphosphoranylidene)acetaldehyde**
95%

280429
**(Triphenylphosphoranylidene)acetonitrile**
97%

688185
**(Triphenylphosphoranylidene)ketene**

728365
**1-[(Triisopropylsilyl)ethynyl]-1,2-benziodoxol-3(1*H*)-one**
≥98.0% (AT)

ALD00558
**1-((3,5-Difluorophenyl)sulfonyl)bicyclo[1.1.0]butane**
95%

ALD00560
**1-((3,5-Difluorophenyl)sulfonyl)bicyclo[2.1.0]pentane**
95%

ALD00570
**1-((4-(Trifluoromethyl)phenyl)sulfonyl)bicyclo[2.1.0]pentane**
racemic version, 95%

158755
**1-(Triphenylphosphoranylidene)-2-propanone**
99%

CF0001
**1-Chloro-3,3-dimethylbenziodoxole**

733520
**1-Cyanobenzimidazole**
96%

CF0002
**1-Fluoro-3,3-dimethylbenziodoxole**

8.07027
**1,2-Propylene oxide**
for synthesis

8.03553
**1,3-Dioxolane**
(stabilised) for synthesis

410233
**1*H*-Benzotriazole-1-methanol**
98%

911941
**2-((Perfluorooctyl)sulfonyl)-1-phenylpropan-1-one**
≥95%

533203
**2-(2-Hydroxy-5-methylphenyl)benzotriazole**
97%

ALD00610
**2-(4-Chloro-6-methoxy-1,3,5-triazin-2-yl)benzonitrile**
≥95%

374377
**2-(Triphenylphosphoranylidene)propionaldehyde**
98%

792373
**2-Chloro-2,2-difluoroacetophenone**
95%

8.04744
**2-Iodoacetamide**
for synthesis

901251
**[2,2′-Bipyridine]-6-carboxylic acid hydrochloride**

349852
**[3-(Ethoxycarbonyl)propyl]triphenylphosphonium bromide**
97%

696641
**3,3-Dimethyl-1-(trifluoromethyl)-1,2-benziodoxole**
95%

CF0015
**4-Bromophenoxytetrafluorobromoethane**

8.18330
**4-Carboxybutyltriphenylphosphonium bromide**
for synthesis

925446
**5-Vinylthianthrenium tetrafluoroborate**
≥95%

745146
**9-Methyl-9*H*-fluorene-9-carbonyl-$^{13}$C chloride**
≥97.0% (GC)

CF0013
**Acid $C_2F_5$-Togni reagent**

CF0012
**Alcohol $C_2F_5$-Togni reagent**

A36603
**Allyltriphenylphosphonium bromide**
99%

596485
**Benzotriazole-1-carboxamide**

419206
**Benzyl(triphenylphosphoranylidene)acetate**
97%

430056
**Benzyltriphenylphosphonium bromide**
96%

B32807
**Benzyltriphenylphosphonium chloride**
99%

8.01986
**Bromotrichloromethane**
for synthesis

682500
**Copper(I) thiophene-2-carboxylate**

710318
**Cyclobutylzinc bromide**
0.5 M in THF

157317
**Cyclopropyltriphenylphosphonium bromide**
98%

408573
**Diethyl (1-cyanoethyl)phosphonate**
97%

410756
**Diethyl (2-oxo-2-phenylethyl)phosphonate**
97%

370479
**Diethyl (2-oxopropyl)phosphonate**
96%

411361
**Diethyl (bromodifluoromethyl)phosphonate**
96%

392626
**Diethyl (hydroxymethyl)phosphonate**
technical grade

366668
**Diethyl (methylthiomethyl)phosphonate**
96%

D91152
**Diethyl 2-bromoethylphosphonate**
97%

D99250
**Diethyl 2,2-diethoxyethylphosphonate**
95%

766992
**Diethyl 4-fluorobenzylphosphonate**
97%

565415
**Diethyl allylphosphonate**
98%

D91071
**Diethyl benzylphosphonate**
99%

744212
**Diethyl carbamoylmethylphosphonate**
95%

D91705
**Diethyl cyanomethylphosphonate**
98%

542032
**Diethyl(3-bromopropyl)phosphonate**
95%

268127
**Diethylphosphonoacetic acid**
95%

617229
**Dimethyl [2-oxo-2-(cyclohexyl-$d_{11}$)ethyl]phosphonate**
98 atom % D

180696
**Dimethyl 2-oxopropylphosphonate**
95%

ALD00616
**Ethyl (*R*,*E*)-2-((mesitylsulfinyl)imino)acetate**
≥95%

ALD00615
**Ethyl (*S*,*E*)-2-((mesitylsulfinyl)imino)acetate**
≥95%

518093
**Ethyl (triphenylphosphoranylidene)pyruvate**
95%

E50604
**Ethyltriphenylphosphonium bromide**
99%

389471
**Ethyltriphenylphosphonium iodide**
95%

377538
**Heptyltriphenylphosphonium bromide**
97%

CF0017
**Imidazolyltetrafluorobromoethane**

347779
**Isoamyltriphenylphosphonium bromide**

98%

377481
**Isopropyltriphenylphosphonium iodide**
98%

ALD00004
**Li-Yu t-Butyl Quinoline**
95%

8.18580
**Methoxymethyl-triphenylphosphonium chloride**
for synthesis

157929
**Methyl (triphenylphosphoranylidene)acetate**
98%

158763
**Methyl diethylphosphonoacetate**
97%

274259
**Methyl *P*,*P*-bis(2,2,2-trifluoroethyl)phosphonoacetate**
95%

486906
**Methyl-$d_3$-triphenylphosphonium bromide**
95 atom % D

523208
**Methyl-$d_3$-triphenylphosphonium iodide**
95 atom % D

130079
**Methyltriphenylphosphonium bromide**
98%

468002
**Methyltriphenylphosphonium chloride**
97%

245054
**Methyltriphenylphosphonium iodide**
97%

809551
**Methyltriphenylphosphonium methylcarbonate**

ALD00596
***N*-((1*S*,2*S*)-1-(3,5-Di-*tert*-butylphenyl)-2-(quinolin-2-yl)butyl)acetamide**
≥95%

ALD00614
***N*-(2-(Phenylthio)ethyl)acetamide**

376876
***N*-Methoxy-*N*-methyl(triphenylphosphoranylidene)acetamide**
98%

8.05968
**N,N′-Methylenediacrylamide**
for synthesis

140732
***N*,*N*-Dimethylformamide dimethyl acetal**
technical grade, 94%

40766
***N*,*N*-Dimethylmethyleneiminium chloride**
≥95.0% (AT)

381985
**Nysted Reagent**
20 wt. % suspension in THF

CF0014
**Phenylsulfanyltetrafluorobromoethane**

698717
**Polyoxyethanyl-a-tocopheryl sebacate**
15 wt. % in $H_2O$

131563
**Propyltriphenylphosphonium bromide**
98%

794473
**Ritter Trifluoroiodomethane-TMG Reagent**

930105
**S-(4-nitrophenyl) methanethioate**
≥95%

ST432
**Sila$^{13}$COgen**
≥95.0% (GC)

ST407
**SilaCOgen**
≥95.0% (GC)

ALD00466
**sodium (2,4-dichlorophenyl)methanesulfinate**

ALD00476
**Sodium (4-bromophenyl)methanesulfinate**

ALD00468
**sodium (4-chlorophenyl)methanesulfinate**

ALD00438
**Sodium (4-methoxyphenyl)methanesulfinate**

790184
**Sodium 1-(trifluoromethyl)cyclopropanesulfinate**

809063
**Sodium 1-Phenoxy-methanesulfinate**

792446
**Sodium 1,1-difluoro-4-(2-methyl-1,3-dioxolan-2-yl)butane-1-sulfinate**

745405
**Sodium 1,1-difluoroethanesulfinate**

ALD00462
**Sodium 2-(2-Bromophenyl)-1,1-difluoroethanesulfinate**
95%

ALD00458
**Sodium 2-(3-Bromophenyl)-1,1-difluoroethanesulfinate**

ALD00460
**Sodium 2-(4-Bromophenyl)-1,1-difluoroethanesulfinate**

809101
**Sodium 4-Methyl-benzenemethanesulfinate**

ALD00230
**Sodium 4,4-difluorocyclohexanesulfinate**

ALD00484
**Sodium 7-Chloro-1,1-difluoroheptane-1-sulfinate**
contains ≤15% sodium 7-(ethylthio)-1,1-difluoroheptane-1-sulfinate

ALD00442
**Sodium butane-1-sulfinate**

ALD00434
**Sodium cyclohexanesulfinate**

746118
**Sodium difluoroheptylazidosulfinate**
95%

ALD00294
**Sodium ethylsulfinate**

ALD00440
**Sodium isopropylsulfinate**

ALD00236
**Sodium *N*-Boc-azetidine-3-sulfinate**

ALD00436
**Sodium phenylmethanesulfinate**

ALD00432
**Sodium propane-1-sulfinate**

900757
**Sodium pyridine-2-sulfinate**

ALD00288
**Sodium *tert*-butylsulfinate**

ALD00232
**Sodium tetrahydropyransulfinate**

743232
**Sodium triflinate**
≥95.0% (T)

ALD00238
**Sodium trifluoropropylsulfinate**

791369
**Tang-Yu Auxiliary**
97%

79522
***tert*-Butyl *P*,*P*-dimethylphosphonoacetate**
≥97.0% (GC)

359181
**Tetraethyl methylenediphosphonate**
97%

674613
**Tetrakis(dimethylamino)ethylene**

174653
**Triethyl 2-phosphonopropionate**
98%

338958
**Triethyl 3-methyl-4-phosphono-2-butenoate, mixture of *cis* and *trans***
technical grade, 80%

116092
**Triethyl 4-phosphonocrotonate, mixture of isomers**
technical grade, 90%

79525
**Triethyl phosphonoacetate**
purum, ≥97.0% (GC)

T61301
**Triethyl phosphonoacetate**
98%

293180
**Triethyl phosphonoacetate-1-$^{13}C$**
99 atom % $^{13}C$

283843
**Triethyl phosphonoacetate-$^{13}C_2$**
99 atom % $^{13}C$

293202
**Triethyl phosphonoacetate-2-$^{13}C$**
99 atom % $^{13}C$

419982
**Triethyl(trifluoromethyl)silane**
98%

164674
**Triethyloxonium hexachloroantimonate**

T79758
**Trimethyl phosphonoacetate**
98%

488712
**Trimethyl(trifluoromethyl)silane**
99%

531421
**Trimethylsilyl 2,2-difluoro-2-(fluorosulfonyl)acetate**

T80489
**Trimethylsulfonium iodide**
98%

740489
**Trimethylsulfonium tetrafluoroborate**
97%

293008
**Trimethylsulfoxonium chloride**

98%

766178
**Triphenylbenzyloxymethylphosphonium chloride**
97%

150193
**Triphenylvinylphosphonium bromide**
97%

902489
**Tris(trimethylsilyl)silanol**
≥95%

CF0041
**Urea crosslinker – $C_4$-arm, NHS ester (DSBU, BuUrBU)**

ALD00606
**Wang−Yu non-directed C−H functionalization ligand**
95%

791806
**Yu-Wasa Auxiliary**
97%

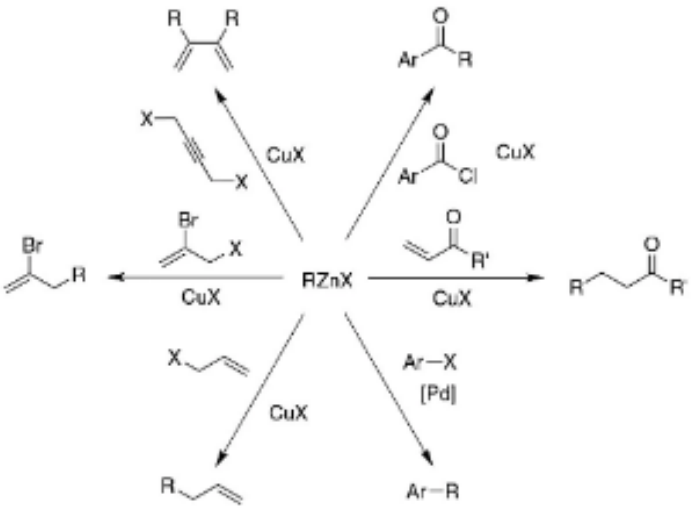
791105
**Zinc chloromethanesulfinate**
95% (H-NMR)

767840
**Zinc difluoromethanesulfinate**
95%

745480
**Zinc isopropylsulfinate**
95%

771406
**Zinc trifluoromethanesulfinate**

# Organozinc Reagents




Organozinc reagents, first prepared by Frankland in 1848, are used extensively in organic synthesis as powerful C–C bond-forming tools, participating in Cu(I)-promoted reactions (developed at Rieke Metals, Inc.) or in Pd-catalyzed cross-coupling reactions (i.e. the Negishi coupling), as well as Michael additions, and electrophilic amination reactions. Interestingly, the choice of preparative route to organozinc reagents of the type RZnX (R=alkyl, aryl; X=halide) plays an important role in the reactivity and stability of these compounds.

We offer a comprehensive range of organozinc compounds, including Rieke® Organozinc Reagents that are stable as solutions in tetrahydrofuran, Rieke® Zinc, as well as numerous pre-formed Rieke® organozinc reagents. Prior to the discovery of Rieke® Zinc, it was not possible to react alkyl, aryl, and vinyl bromides or chlorides directly with zinc metal. The preparation of these reagents was only possible by a metathesis reaction of a zinc halide with an organolithium or Grignard reagent. Unfortunately, this approach was of limited utility since the process was not compatible with many types of functional groups. Rieke® Zinc, on the other hand, will react directly with the bromides or chlorides and will tolerate a variety of sensitive groups such as nitriles, esters, amides, ethers, sulfides, and ketones to give functionalized organozinc reagents.

710326
**(1,3-Dioxolan-2-ylmethyl)zinc bromide**
0.6 M in THF

533475
**(2-Chloro-5-pyridyl)methylzinc chloride solution**
0.5 M in THF

499021
**(2-Naphthylmethyl)zinc bromide solution**
0.5 M in THF

498025
**(Cyclohexylmethyl)zinc bromide solution**
0.5 M in THF

497606
**1-Adamantylzinc bromide solution**
0.5 M in THF

533688
**2-(1,3-Dioxolan-2-yl)]ethyl]zinc bromide solution**
0.5 M in THF

520470
**2-(Ethoxycarbonyl)phenylzinc bromide solution**
0.5 M in THF

497614
**2-Adamantylzinc bromide solution**
0.5 M in THF

520322
**2-Cyanobenzylzinc bromide solution**
0.5 M in THF

497908
**2-Cyanoethylzinc bromide solution**
0.5 M in THF

498548
**2-Ethylbutylzinc bromide solution**
0.5 M in THF

498580
**2-Fluorobenzylzinc chloride solution**
0.5 M in THF

533513
**2-Fluorophenylzinc iodide solution**
0.5 M in THF

680966
**2-Propylzinc bromide solution**
0.5 M in THF

499382
**2-Pyridylzinc bromide solution**
0.5 M in THF

499404
**2-Thiazolylzinc bromide solution**
0.5 M in THF

499412
**2-Thienylzinc bromide solution**
0.5 M in THF

541273
**2,3,4,5,6-Pentafluorobenzylzinc bromide solution**
0.5 M in THF

535230
**2,5-Dichlorophenylzinc iodide solution**
0.5 M in THF

766127
**2,5-Dilfuoro-4-methoxyphenylzinc bromide solution**
0.6 M in THF

533351
**2,6-Dichlorobenzylzinc chloride solution**
0.5 M in THF

521671
**2,6-Difluorobenzylzinc bromide solution**
0.5 M in THF

710261
**2,6-Difluorophenylzinc bromide solution**
0.5 M in THF

630373
**3-Acetoxyphenylzinc iodide solution**
0.5 M in THF

766135
**3-Butenylzinc bromide solution**
0.6 M in THF

497800
**3-Chloro-4-methylphenylzinc iodide solution**
0.5 M in THF

497576
**3-Chlorobenzylzinc chloride solution**

0.5 M in THF

497967
**3-Cyanopropylzinc bromide solution**
0.5 M in THF

498521
**3-Ethoxy-3-oxopropylzinc bromide solution**
0.5 M in THF

498793
**3-Methoxybenzylzinc chloride solution**
0.5 M in THF

498831
**3-Methoxyphenylzinc iodide solution**
0.5 M in THF

499471
**3,5-Difluorobenzylzinc bromide solution**
0.5 M in THF

710296
**4-[(4-Morpholino)methyl]phenylzinc iodide solution**
0.25 M in THF

630365
**4-Acetoxyphenylzinc iodide solution**
0.5 M in THF

535249
**4-Bromo-2-fluorophenylzinc iodide solution**
0.5 M in THF

497762
**4-Chlorobenzylzinc chloride solution**
0.5 M in THF

517380
**4-Cyanobenzylzinc bromide solution**
0.5 M in THF

497894
**4-Cyanobutylzinc bromide solution**
0.5 M in THF

498491
**4-Ethoxy-4-oxobutylzinc bromide solution**
0.5 M in THF

499455
**4-Ethoxybenzylzinc chloride solution**
0.5 M in THF

498602
**4-Fluorobenzylzinc chloride solution**
0.5 M in THF

498645
**4-Fluorophenylzinc bromide solution**
0.5 M in THF

498807
**4-Methoxybenzylzinc chloride solution**
0.5 M in THF

498998
**4-Methyl-2-pyridylzinc bromide solution**
0.5 M in THF

498882
**4-Methylbenzylzinc chloride solution**
0.5 M in THF

533394
**5-Bromo-2-methoxybenzylzinc chloride solution**
0.5 M in THF

498513
**5-Ethoxy-5-oxopentylzinc bromide solution**
0.5 M in THF

533564
**5-Ethoxycarbonyl-2-fufurylzinc chloride solution**
0.5 M in THF

498505
**6-Ethoxy-6-oxohexylzinc bromide solution**
0.5 M in THF

499013
**6-Methyl-2-pyridylzinc bromide solution**
0.5 M in THF

498777
**α-Methylbenzylzinc bromide solution**
0.5 M in THF

497517
**Benzylzinc bromide solution**
0.5 M in THF

566748
**Bis(pentafluorophenyl)zinc**
97%

497746
**Butylzinc bromide solution**
0.5 M in THF

710318
**Cyclobutylzinc bromide**
0.5 M in THF

498033
**Cyclohexylzinc bromide solution**
0.5 M in THF

498041
**Cyclopentylzinc bromide solution**
0.5 M in THF

680982
**Cyclopropylzinc bromide solution**
0.5 M in THF

256781
**Diethylzinc**
≥52 wt. % Zn basis

406023
**Diethylzinc solution**
1.0 M in heptane

406023
**Diethylzinc solution**
1.0 M in heptane

296112
**Diethylzinc solution**
1.0 M in hexanes

568112
**Diisopropylzinc solution**
1.0 M in toluene

364401
**Dimethylzinc solution**
2.0 M in toluene

417246
**Dimethylzinc solution**
1.0 M in heptane

498963
**Isobutylzinc bromide solution**
0.5 M in THF

417297
**Methylzinc chloride solution**
2.0 M in THF

499307
**Phenethylzinc bromide solution**
0.5 M in THF

524719
**Phenylzinc bromide solution**
0.5 M in THF

499331
**Phenylzinc iodide solution**
0.5 M in THF

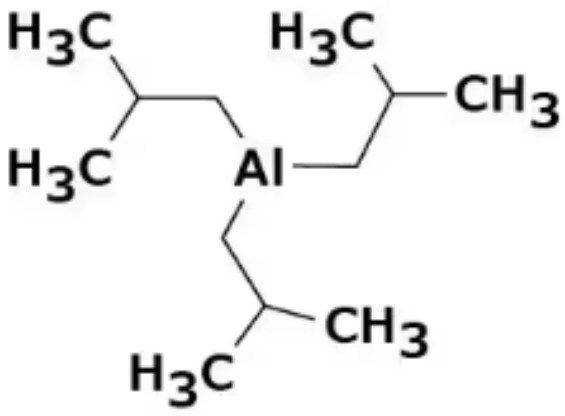
499374
**Propylzinc bromide solution**
0.5 M in THF

497738
***sec*-Butylzinc bromide solution**
0.5 M in THF

497754
***tert*-Butylzinc bromide solution**
0.5 M in THF

8.08803
**Zinc(II) acetylacetonate**
for synthesis

# Organoaluminum Reagents




Organoaluminum reagents are powerful tools for organic synthesis and the development of new technologies and play an important role in the formation of known bond formations.

Selection of applications:

- Some organoaluminum reagents react with carbonyl compounds to afford the corresponding allenic alcohols or homopropargylic alcohols.
- Organoaluminum reagents can participate in copper-catalyzed kinetic resolution of alkenyl cyclopropane malonates.
- Cationic organoaluminum compounds are potential hydroamination catalysts.
- Organoaluminum reagents are also employed in asymmetric conjugate addition reactions due to their commercial availability and proof of application in carboalumination reactions.

Since several organoaluminum reagents display high sensitivity to both air and moisture, we provide top-quality packaging in Sure/Seal™ bottles to prolong the lifetime of these reagents. Smaller-sized bottles require fewer needle entries to consume the reagent volume. Therefore, many of our organometallic reagents are also being transitioned into exclusive 25 mL Sure/Seal™ packaging to reduce waste and decomposition of more unstable reagents.

Discover how our organoaluminum reagents can enable your cross-coupling reactions and facilitate the discovery of new bond-forming methodologies. We also offer organozinc reagents and organosilicon reagents for all your organometallic applications.

682101
**Bis(trimethylaluminum)-1,4-diazabicyclo[2.2.2]octane adduct**

256714
**Diethylaluminum chloride**
97%

212806
**Diethylaluminum chloride solution**
1.0 M in hexanes

276863
**Diethylaluminum cyanide solution**
1.0 M in toluene

256749
**Diethylaluminum ethoxide**
97%

192759
**Ethylaluminum dichloride solution**
25 wt. % in toluene

251615
**Ethylaluminum dichloride solution**
1.0 M in hexanes

256943
**Ethylaluminum sesquichloride**
97%

718386
**Lithium diisobutyl-*tert*-butoxyaluminum hydride solution**
0.25 M in THF/hexanes

257168
**Triethylaluminum**
93%

404845
**Triethylaluminum solution**
1.0 M in heptane

252662
**Triethylaluminum solution**
1.0 M in hexanes

192708
**Triethylaluminum solution**
25 wt. % in toluene

423793
**Triisobutylaluminum solution**
1.0 M in hexanes

663301
**Trimethylaluminum**
packaged for use in deposition systems

257222
**Trimethylaluminum**
97%

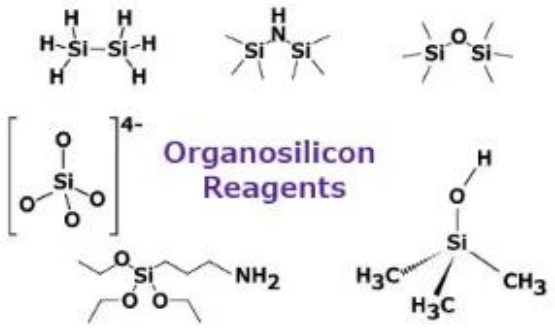
268569
**Trimethylaluminum solution**
2.0 M in hexanes

379239
**Trimethylaluminum solution**
2.0 M in heptane

198048
**Trimethylaluminum solution**
2.0 M in toluene

386553
**Trioctylaluminum solution**
25 wt. % in hexanes
730572
**Triphenylaluminum solution**
1 M in dibutyl ether

# Organosilicon Reagents




Our organosilicon and related silicon reagents have many practical synthesis applications, as well as manufacturing applications in the production of adhesives, sealants, automotive lubricants, computer chips, and dry-cleaning solvents to healthcare products such as skin care products, small molecule drugs, and contacts.

Due to drawbacks inherent in transition-metal-catalyzed cross-coupling of organometallic reagents with organic halides, organosilicon reagents have emerged as suitable

alternatives. The lack of toxicity, high chemical stability, and low molecular weight of organosilane compounds make them ideal for use as nucleophilic partners in cross-coupling with organic halides and pseudohalides. The conditions for the construction of new C–C bonds via palladium-catalyzed cross-coupling of organosilanes are mild but require a nucleophilic promoter to provide high yields of the desired cross-coupling products. The byproducts of the cross-coupling reaction are polysiloxanes, which can be easily removed by conventional methods such as chromatography (silica gel or reverse-phase) or distillation. We are proud to offer a large variety of silicon compounds that are highly competent coupling partners for the palladium-catalyzed cross-coupling reaction to make your breakthroughs feel closer than ever.

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## DISILANES

Disilanes are widely utilized in the manufacturing of photovoltaic devices (e.g. silicon wafers, thin film transistors, solar cells) via chemical vapor deposition of amorphous silicon, which is the deposition product of thermally decomposed disilanes. Disilanes are also utilized in the synthesis of allylsilanes via silyl nucleophilic substitution reactions with allylic carbonates under micellar catalytic conditions. The mildness of the reaction conditions in $H_2O$-based media allows for applications in one-pot synthesis sequences.

## SILANOLS

The Pd-catalyzed cross-coupling of silicon compounds has rapidly gained acceptance as a suitable alternative to more commonly known methods such as: Stille (Sn), Kumada (Mg), Suzuki (B), and Negishi (Zn) cross-couplings, which frequently utilizes silanols. In the presence of a fluoride activation source, alkenyl(dimethyl)silanols readily react with both aryl and alkenyl halides to give the coupled adducts very good yields. Alternatively, the Pd-catalyzed cross-coupling can also be performed under basic activation using TMSOK for in situ generation of a nucleophilic silanolate. The utility of performing the cross-coupling under basic activation lies in the ability to perform the reaction in the presence of fluoride-sensitive silyl protecting groups. Alkynylsilanols are also active coupling partners under similar conditions.

## SILAZANES

Silazanes are a family of hybrid organic–inorganic materials prepared by the ammonolysis or aminolysis of chlorosilanes. Various silazanes and silazane polymers have been synthesized and investigated as precursors of silicon carbonitride ceramics, coatings, surface modifiers, and additives of silicone rubbers. They effectively impede the rearranging degradation of polysiloxane chains by removal of trace water or the SiAOH group using the reactivity of SiAN bond, and thus improve the thermal stability of silicone rubbers. Silazanes are also used to modify organic intermediates to make chemical processing reactions possible or more efficient, and to incorporate silicon chemicals into finished products to modify their physical properties.

## SILICATES

The majority of silicates are oxides that are extensively used in materials science and engineering. Doped silicates confer specific properties to materials. These products can be

applied to xerogel and silica sol-gel synthesis, formation of hexagonal mesoporous silica layers, $H^+$-magadiite intercalation, and to the study of mixed-metal bioactive glasses and other bioactive materials utilized in bioengineering.

## SILOXANES

The use of silicon compounds as transmetalation reagents has attracted much attention as a viable alternative to the popular Stille and Suzuki coupling reactions, mainly due to the formation of nontoxic byproducts and the stability of the reagents in many reaction conditions. Silicon-based coupling reactions can be carried out using aryl, heteroaryl, or alkenyl halides and alkoxysilanes in the presence of palladium or rhodium catalysts. Among the various types of silicon compounds available, alkoxysilanes are the most effective in the coupling reactions. Trialkoxysilanes are important silylating agents and are widely used for surface functionalization via modification of substrates under standard solution deposition conditions. As a practical alternative to Stille and Suzuki coupling, the rhodium-catalyzed addition of trialkoxysilanes to carbonyl compounds is a feasible substitute.

440140
**(3-Aminopropyl)triethoxysilane**
99%

706493
**(3-Aminopropyl)triethoxysilane**
packaged for use in deposition systems, ≥98%

281778
**(3-Aminopropyl)trimethoxysilane**
97%

437808
**(3-Bromopropyl)trichlorosilane**
90%

18265
**(3-Bromopropyl)trimethoxysilane**
≥97.0%

8.42016
**(3-Chloropropyl)trichlorosilane**
for synthesis

50059
**(3-Glycidyloxypropyl)triethoxysilane**
≥97.0% (GC)

440167
**(3-Glycidyloxypropyl)trimethoxysilane**
≥98%

58035
**(3-Iodopropyl)trimethoxysilane**
≥95.0% (GC)

63796
**(3-Mercaptopropyl)methyldimethoxysilane**
≥95.0%

63797
**(3-Mercaptopropyl)triethoxysilane**
≥80% (GC), technical

175617
**(3-Mercaptopropyl)trimethoxysilane**
95%

597910
**(4-Chlorophenyl)triethoxysilane**
97%

ADE000246
**(5-Trimethylsilanylethynyl-pyridin-2-yl)-carbamic acid tert-butyl ester**
Aldrich[CPR]

347094
**(Chloromethyl)dimethylphenylsilane**
98%

205354
**(Chloromethyl)trimethylsilane**
98%

220140
**(Dichloromethyl)trimethylsilane**
96%

431044
**(Heptafluoropropyl)trimethylsilane**
97%

57903
**(Iodomethyl)trimethylsilane**
≥99.0% (GC)

277711
**(Methoxymethyl)trimethylsilane**
98%

539287
**(*N*,*N*-Dimethylaminopropyl)trimethoxysilane**
96%

440817
**1-[3-(Trimethoxysilyl)propyl]urea**
97%

92751
**1-(Trimethylsilyl)imidazole**
≥98.0%

41571
**1,1-Dimethylsiletane**
≥95%

370886
**1,1,1,3,5,5,5-Heptamethyltrisiloxane**
97%

365157
**1,1,3,3-Tetramethyl-1,3-diphenyldisilazane**
96%

235733
**1,1,3,3-Tetramethyldisiloxane**
97%

448621
**1,1,3,3,5,5-Hexamethyltrisiloxane**
95%

447250
**1,2-Bis(triethoxysilyl)ethane**
96%

667897
**1,2-Diethoxy-1,1,2,2-tetramethyldisilane**
97%

678163

**1,2-Dimethoxy-1,1,2,2-tetramethyldisilane**
97%

440582
**1,3-Bis(3-cyanopropyl)tetramethyldisiloxane**
97%

14845
**1,3-Bis(3-glycidyloxypropyl)tetramethyldisiloxane**
≥95.0% (GC)

371904
**1,3-Divinyltetramethyldisiloxane**
97%

534463
**1,3,5,7,9,11,14-Heptaisobutyltricyclo[7.3.3.1$^{5,11}$]heptasiloxane-endo-3,7,14-triol**
97%

483192
**1,4-Bis(dimethylsilyl)benzene**
97%

598038
**1,4-Bis(triethoxysilyl)benzene**
96%

667420
**1*H*,1*H*,2*H*,2*H*-Perfluorooctyltriethoxysilane**
98%

ADE001168
**2-((tert-Butyldimethylsilyloxy)methyl)furo[3,2-b]pyridine-6-carboxylic acid**
Aldrich$^{CPR}$

ADE000675
**2-((Trimethylsilyl)ethynyl)pyridin-3-amine**
Aldrich$^{CPR}$

681482
**2-(Allyldimethylsilyl)pyridine**
90%

681490
**2-(Dimethylsilyl)pyridine**
90%

333530
**2-Bromoallyltrimethylsilane**
technical grade, 90%

ADE000240
**2-Chloro-3-trimethylsilanylethynyl-pyridine**
Aldrich[CPR]

ADE000239
**2-Chloro-5-trimethylsilanylethynyl-pyridine**
Aldrich[CPR]

ADE001279
**2,2-Dimethyl-1-(6-((trimethylsilyl)ethynyl)-2,3-dihydro-1H-pyrido[2,3-b][1,4]oxazin-1-yl)propan-1-one**
Aldrich[CPR]

ADE000369
**2,2-Dimethyl-N-(3-trimethylsilanylethynyl-pyridin-2-yl)-propionamide**
Aldrich[CPR]

ADE000248
**2,2-Dimethyl-N-(5-trimethylsilanylethynyl-pyridin-2-yl)-propionamide**
Aldrich[CPR]

796859
**2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane**
95%

40094
**2,4,6,8-Tetramethyl-2,4,6,8-tetraphenylcyclotetrasiloxane**
technical

396281
**2,4,6,8-Tetramethyl-2,4,6,8-tetravinylcyclotetrasiloxane**

512990
**2,4,6,8-Tetramethylcyclotetrasiloxane**
≥98.5%, ≥99.999% trace metals basis

440302
**[3-(2-Aminoethylamino)propyl]trimethoxysilane**
technical grade, ≥80%

8.41807
**[3-(2,3-Epoxypropoxy)-propyl]-trimethoxysilane**
for synthesis

8.18816
**3-(Chloropropyl)-trimethoxysilane**
for synthesis

448664
**[3-(Diethylamino)propyl]trimethoxysilane**
96%

125377
**3-(Triethoxysilyl)propionitrile**
97%

413364
**3-(Triethoxysilyl)propyl isocyanate**
95%

8.21619
**3-(Triethoxysilyl)propylamine**
for synthesis

8.18818
**3-(Trimethoxysilyl)-1-propanethiol**
for synthesis

475149
**3-(Trimethoxysilyl)propyl acrylate**
92%, contains 100 ppm BHT as inhibitor

440159
**3-(Trimethoxysilyl)propyl methacrylate**
98%

8.41248
**3-Cyanopropyl-trichlorosilane**
for synthesis

374156
**3-Cyanopropyltriethoxysilane**
98%

ADE000377

**3-Dimethoxymethyl-5-trimethylsilanylethynyl-pyridine**
Aldrich[CPR]

ANV00139
**3-Iodo-6-nitro-1-[[2-(trimethylsilyl)ethoxy]methyl]-1H-Indazole**
Aldrich[CPR]

ADE001216
**3-Methyl-6-((trimethylsilyl)ethynyl)-3H-imidazo[4,5-b]pyridine**
Aldrich[CPR]

ADE000972
**4-((Trimethylsilyl)ethynyl)-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE001297
**4-(1H-Pyrazol-4-yl)-7-((2-(trimethylsilyl)ethoxy)methyl)-7H-pyrrolo[2,3-d]pyrimidine**
Aldrich[CPR]

ADE000184
**4-(tert-Butyl-dimethyl-silanyloxymethyl)-pyridin-2-ylamine**
Aldrich[CPR]

ADE000978
**4-Chloro-5-methyl-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

638102
**4,4′-Bis(triethoxysilyl)-1,1′-biphenyl**
≥90% (VPCC)

ADE001050
**5-(Trifluoromethyl)-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine-4-carboxylic acid**
Aldrich[CPR]

ADE001117
**5-(Trifluoromethyl)-4-((trimethylsilyl)ethynyl)-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE001114
**5-(Trifluoromethyl)-4-(trimethylsilyl)-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE000903

**5-Bromo-1-triisopropylsilanyl-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE001192
**5-Bromo-2-(trimethylsilyl)furo[2,3-b]pyridine**
Aldrich[CPR]

ADE000450
**5-Bromo-3-((trimethylsilyl)ethynyl)pyridin-2-amine**
Aldrich[CPR]

ADE000913
**5-Bromo-3-iodo-1-triisopropylsilanyl-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE001002
**5-Chloro-4-iodo-1-(triisopropylsilyl)-1H-pyrrolo[2,3-b]pyridine**
Aldrich[CPR]

ADE000076
**5-Iodo-7-(triisopropylsilyl)-7H-pyrrolo[2,3-d]pyrimidine**
Aldrich[CPR]

ADE001269
**6-((Trimethylsilyl)ethynyl)-1H-pyrido[2,3-b][1,4]oxazin-2(3H)-one**
Aldrich[CPR]

ADE000959
**6-Bromo-1-(triisopropylsilyl)-1H-pyrrolo[3,2-b]pyridine**
Aldrich[CPR]

ADE001149
**6-Bromo-2-((tert-butyldimethylsilyloxy)methyl)furo[3,2-b]pyridine**
Aldrich[CPR]

ADE001141
**6-Bromo-2-(trimethylsilyl)furo[3,2-b]pyridine**
Aldrich[CPR]

ADE000715
**6-Bromo-2-chloro-4-((trimethylsilyl)ethynyl)pyridin-3-amine**
Aldrich[CPR]

ADE001175
**6-Iodo-2-(trimethylsilyl)furo[3,2-b]pyridine**

Aldrich[CPR]

362824
**Acetyltrimethylsilane**
97%

107778
**Allyltrichlorosilane**
95%

446955
**Allyltrimethoxysilane**
95%

679267
**Allyltrimethoxysilane**
≥98%, deposition grade

208264
**Allyltrimethylsilane**
98%

15200
**Bis[3-(triethoxysilyl)propyl] tetrasulfide**
technical, ≥90% (NMR)

221066
**Bis(chloromethyl)dimethylsilane**
97%

361747
**Chlorobis(trimethylsilyl)methane**
97%

444278
**Decamethylcyclopentasiloxane**
97%

235679
**Decamethyltetrasiloxane**
97%

545236
**Di-*tert*-butylsilane**
97%

431117
**Diacetoxydimethylsilane**
98%

448605
**Diethoxy(methyl)phenylsilane**
97%

175595
**Diethoxydimethylsilane**
97%

40120
**Diethoxydimethylsilane**
purum, ≥97.0% (GC)

423815
**Diethylsilane**
99%

339873
**Diiodosilane**
contains copper as stabilizer

8.14720
**Diisobutyldimethoxysilane**
for synthesis

8.14719
**Diisopropyldimethoxysilane**
for synthesis

104906
**Dimethoxydimethylsilane**
95%

556688
**Dimethoxydimethylsilane**
≥99.5%, 99.999% metals basis

42940
**Dimethoxydiphenylsilane**
≥95.0% (GC)

446203
**Dimethoxymethylvinylsilane**
97%

248479
**Dimethylisopropylsilane**
98%

276138
**Dimethyloctadecylsilane**
97%

235016
**Dimethylphenylsilane**
≥98%

148482
**Diphenylsilane**
97%

D213705
**Diphenylsilanediol**
95%

447269
**Dodecamethylpentasiloxane**
97%

44237
**Dodecyltriethoxysilane**
technical

8.18821
**Ethoxytrimethylsilane**
for synthesis

52360
**Hexadecyltrimethoxysilane**
technical, ≥85% (GC)

235687
**Hexamethylcyclotrisiloxane**
98%

217069
**Hexamethyldisilane**

98%

8.18889
**Hexamethyldisilane**
for synthesis

283134
**Hexamethyldisilathiane**
synthesis grade

379212
**Hexamethyldisilazane**
*ReagentPlus®*, 99.9%

440191
**Hexamethyldisilazane**
reagent grade, ≥99%

86944
**Hexamethyldisilazane**
produced by Wacker Chemie AG, Burghausen, Germany, ≥97.0% (GC)

8.14051
**Hexamethyldisiloxane**
for synthesis

52630
**Hexamethyldisiloxane**
puriss., ≥98.5% (GC)

326739
**Hexamethyldisiloxane**
NMR grade, ≥99.5%

469300
**Hexamethyldisiloxane**
viscosity 0.65 cSt (25 °C)

205389
**Hexamethyldisiloxane**
≥98%

53262
**Hexylsilane**
≥97.0%

444065
**Isobutyl(trimethoxy)silane**
97%

699713
**Isobutyltriethoxysilane**
≥95%

738999
**Isooctyl trimethoxysilane, mixture of isomers**
97%

380393
**Isopropoxytrimethylsilane**
98%

692352
**Magnesium bis(hexamethyldisilazide)**
97%

510262
**Methallyltrimethylsilane**
97%

66612
**Methyldiethoxysilane**
≥96%

483176
**Methylphenylsilane**
95%

M85301
**Methyltrichlorosilane**
99%

440299
**Methyltrichlorosilane**
≥96%

679208
**Methyltrichlorosilane**
deposition grade, ≥98% (GC), ≥99.99% (as metals)

440809

***N*-[3-(Trimethoxysilyl)propyl]aniline**

104884
***N*-[3-(Trimethoxysilyl)propyl]ethylenediamine**
97%

ADE000279
**N-[4-(tert-Butyl-dimethyl-silanyloxymethyl)-pyridin-2-yl]-2,2-dimethyl-propionamide**
Aldrich[CPR]

ADE001148
**N-(2-(Trimethylsilyl)furo[3,2-b]pyridin-7-yl)pivalamide**
Aldrich[CPR]

8.19172
**N-(2-Aminoethyl)-3-aminopropyltrimethoxysilane**
for synthesis

ADE000234
**N-(2-Chloro-6-iodo-4-(trimethylsilyl)pyridin-3-yl)pivalamide**
Aldrich[CPR]

578932
***N*-Allyl-*N*,*N*-bis(trimethylsilyl)amine**
97%

CDS001209
***n*-Octadecyltriethoxysilane**
Aldrich[CPR]

766038
**N,N'-Bis[2-(2-*tert*-butyldimethylsilyloxyethoxy)ethyl]-3,4,9,10-perylenetetracarboxylic diimide**
97%

413348
***N*$^1$-(3-Trimethoxysilylpropyl)diethylenetriamine**
technical grade

442291
**Octadecylsilane**
97%

235695
**Octamethylcyclotetrasiloxane**
98%

8.14750
**Octamethylcyclotetrasiloxane**
for synthesis

235709
**Octamethyltrisiloxane**
98%

419354
***p*-Tolyltrichlorosilane**
95%

76840
**Pentamethyldisiloxane**
≥95.0%

335150
**Phenylsilane**
97%

469319
**Poly(dimethylsiloxane)**
viscosity 1.0 cSt (25 °C)

900401
**SLAP 2,3-Bicyclo-(3,4-THF) *N*-BnPip Reagent**
≥95%

900403
**SLAP HydroPyrrolopyrazine Reagent**

900399
**SLAP *N*-Bn Pip Reagent**
95%

900406
**SLAP *N*-Bn-3Me-Pip Reagent**

900755
**SLAP TA**
95%

ADE001045
**tert-Butyl 5-methyl-3-((trimethylsilyl)ethynyl)-1H-pyrrolo[2,3-b]pyridine-1-carboxylate**
Aldrich[CPR]

294764
***tert*-Butyldimethylsilane**
95%

289094
***tert*-Butyldimethylsilanol**
99%

86717
**Tetraallylsilane**
≥97.0% (GC)

T5702
**Tetrabutyl orthosilicate**
97%

86578
**Tetraethyl orthosilicate**
≥99.0% (GC)

131903
**Tetraethyl orthosilicate**
reagent grade, 98%

333859
**Tetraethyl orthosilicate**
99.999% trace metals basis

8.00658
**Tetraethyl orthosilicate**
for synthesis

510874
**Tetraethylsilane**
99%

87642
**Tetrakis(trimethylsilyl)silane**
≥97.0%

454516
**Tetrakis(trimethylsilyloxy)silane**
97%

87682
**Tetramethyl orthosilicate**
purum, ≥98.0% (GC)

218472
**Tetramethyl orthosilicate**
98%

341436
**Tetramethyl orthosilicate**
≥99%

393398
**Tetramethyl-$d_{12}$ orthosilicate**
99 atom % D

523771
**Tetramethylsilane**
electronic grade, ≥99.99% trace metals basis

87921
**Tetramethylsilane**
≥99.0% (GC)

T24007
**Tetramethylsilane**
ACS reagent, NMR grade, ≥99.9%

235741
**Tetrapropyl orthosilicate**
95%

679240
**Tetrapropyl orthosilicate**
≥98%, deposition grade

318256
**Tetravinylsilane**
97%

278777
**Tributylsilane**
99%

448931
**Trichloro(1*H*,1*H*,2*H*,2*H*-perfluorooctyl)silane**
97%

452807
**Trichloro(3,3,3-trifluoropropyl)silane**

97%

8.42025
**Trichloro(chloromethyl)silane**
for synthesis

235725
**Trichloro(octyl)silane**
97%

420034
**Trichloro(phenethyl)silane**
95%

440108
**Trichloro(phenyl)silane**
≥97.0%

44230
**Trichlorododecylsilane**
≥95.0% (GC)

8.21667
**Trichloroethylsilane**
for synthesis

175552
**Trichlorosilane**
99%

597007
**Triethoxy-2-thienylsilane**
97%

440574
**Triethoxy(ethyl)silane**
96%

551635
**Trimethoxy[3-(methylamino)propyl]silane**
95%

438340
**Trimethoxy(2-phenylethyl)silane**
98%

91877

**Trimethoxy(3,3,3-trifluoropropyl)silane**
≥97.0% (GC)

376213
**Trimethoxy(octadecyl)silane**
technical grade

376221
**Trimethoxy(octyl)silane**
96%

69471
**Trimethoxymethylsilane**
purum, ≥98.0% (GC)

440175
**Trimethoxymethylsilane**
95%

246174
**Trimethoxymethylsilane**
98%

435651
**Trimethoxyphenylsilane**
≥94%

104744
**Trimethoxyphenylsilane**
97%

8.43658
**Trimethoxyphenylsilane**
for synthesis

8.41268
**Trimethoxyvinylsilane**
for synthesis

359491
**Trimethyl(methylthio)silane**
97%

197734
**Trimethyl(phenyl)silane**
99%

488712
**Trimethyl(trifluoromethyl)silane**
99%

725986
**Trimethylsilanol**
≥97.5% (GC)

148504
**Triphenylsilane**
97%

422150
**Triphenylsilanethiol**
98%

440825
**Tris[3-(trimethoxysilyl)propyl] isocyanurate**
technical grade

370908
**Tris(trimethylsiloxy)silane**
≥98%

360120
**Tris(trimethylsilyl)amine**
98%

302600
**Tris(trimethylsilyl)methane**
97%

360716
**Tris(trimethylsilyl)silane**
97%

235768
**Vinyltrimethoxysilane**
98%

440221
**Vinyltrimethoxysilane**
97%

213950
**Vinyltrimethylsilane**
97%

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