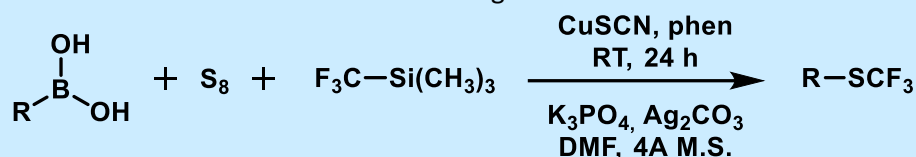


Trimethyl(trifluoromethyl)silane (abb; CF₃-TMS)



Purity	99%
CAS Number	81290-20-2
Molecular Formula	C ₄ H ₉ F ₃ Si
Molecular Weight	142.2

Trifluoromethylsulfide groups are expected to have a unique physiological activity due to their lipophilic character. A new CF₃S-Introduction system; Ruppert-Prakash reagent with CuSCN, organo-boronic acid, and sulfur to introduce trifluoromethylsulfide group on aromatics. This combination is easier to obtain than CF₃SSCF₃ or CF₃SAg.



Application

No.	R	phen	Yd(%)
1	C ₆ H ₅ -	0.02 mmol	85
2	C ₆ H ₅ -	0.02 mmol	78
3	C ₆ H ₅ -	0.04 mmol	95
4	C ₆ H ₅ O C ₆ H ₅ -	0.04 mmol	91
5	CH ₃ OCO C ₆ H ₅ -	0.04 mmol	67

Reaction condition; R-B(OH)₂ 0.2mmol, CuSCN 0.02 mmol, S₈ 0.6mmol, CF₃-TMS 1.0mmol, phen 0.02-0.04 mmol, K₃PO₄ 0.6mmol, Ag₂CO₃ 0.4mmol, 4A M.S. 50mg, DMF 4ml, 24hr, RT, under N₂

Angw. Chem. Int. Ed. 2012, 51, p2492-2495

Org. & Biomol. Chem. 2016, 14, p7150-7182

Properties:

Appearance	Liquid
Boiling point, °C	54-55
Flash point, °C	-16

Capacity: 500kg/month

Packing: -

UN, PG: -