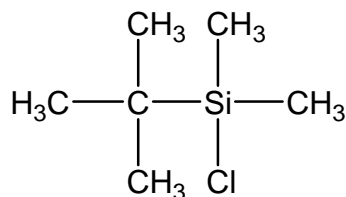


SiSiB[®] PC5710

Tert-butyldimethylchlorosilane



Typical Physical Properties

Chemical Name	Tert-Butyldimethylchlorosilane
Formula	C ₆ H ₁₅ ClSi
CAS No.	18162-48-6
EINECS No.	242-042-4
Item	Targets & Limits
Molecular Weight	150.72
Color and Appearance	White crystalline solid
Density _{20/4°C}	0.83
Boiling Point	124-126°C [760mmHg]
Melting Point	79-81°C
Flash Point	22°C
Min. Purity	99.0%

Useful silylation reagent for hydroxyl functions, giving silyl ethers with greater stability to aqueous hydrolysis, compared to other silyl protecting groups e.g. TMS. This feature of PC5710 has seen it become one of the most widely used OH organic chemistry blocking groups, especially in synthetic applications. Silylation is often carried out using a base/catalyst such as imidazole, DMAP or DBU. The organic chemistry group will survive many types of aqueous work up and chromatography. However it is easily cleaved under mild conditions. Cleavage of this protecting group can generally be effected using fluoride ion, e.g. TBAF in aprotic solvent, or KF with a phase-transfer catalyst.