



>>Entry Name: Chlorotris(trimethylsilyl)silane

Synonym(s): 2-Chloro-1,1,1,3,3,3-hexamethyl-2-(trimethylsilyl)trisilane, 9Cl. Tris(trimethylsilyl)chlorosilane. Sisyl chloride

CAS Registry Number: 5565-32-2

$(\text{Me}_3\text{Si})_3\text{SiCl}$

Molecular Formula:  $\text{C}_9\text{H}_{27}\text{ClSi}_4$

Molecular Weight: 283.107

Accurate Mass: 282.087835

Percentage Composition: C 38.18%; H 9.61%; Cl 12.52%; Si 39.68%

Source/Synthesis: Synth. from  $\text{HSiCl}_3 + \text{Li} + 3\text{Me}_3\text{SiCl}$ , then  $\text{CCl}_4$

Use/Importance: Reagent for protection of alcohols

Physical Description: Solid

Melting Point: Mp 50°

Boiling Point: Bp<sub>1.8</sub> 93°

Aldrich: 40940-5

#### References:

Gilman, H. *et al.*, *J. Organomet. Chem.*, 1966, **5**, 199, (*synth*)

Buerger, H. *et al.*, *J. Organomet. Chem.*, 1970, **21**, 291, (*ir, pmr, Raman, synth*)

Marsmann, H.C. *et al.*, *Z. Naturforsch., B*, 1980, **35**, 1541, (*Si-29 nmr*)

Brook, M.A. *et al.*, *Tet. Lett.*, 1997, **38**, 6947-7000; 1999, **55**, 10027-10040, (*use*)