



>>Entry Name: 2-Trimethylsilylethanesulfonic acid, 12Cl

$\text{Me}_3\text{SiCH}_2\text{CH}_2\text{SO}_3\text{H}$

Molecular Formula: $\text{C}_5\text{H}_{14}\text{O}_3\text{SSi}$

Molecular Weight: 182.315

Accurate Mass: 182.043292

Percentage Composition: C 32.94%; H 7.74%; O 26.33%; S 17.59%; Si 15.40%

>>Derivative: Na salt

CAS Registry Number: 18143-40-3

Molecular Formula: $\text{C}_5\text{H}_{13}\text{NaO}_3\text{SSi}$

Molecular Weight: 204.297

Accurate Mass: 204.025234

Percentage Composition: C 29.40%; H 6.41%; Na 11.25%; O 23.49%; S 15.70%; Si 13.75%

Source/Synthesis: Synth. from $\text{Me}_3\text{SiCH}=\text{CH}_2$ + NaHSO_3 + PhCO_3Bu^t in MeOH

Use/Importance: Commercially available

Physical Description: Hygroscopic white solid

Aldrich: 30793-9

>>Derivative: Chloride

Synonym(s): 2-Trimethylsilylethanesulfonyl chloride, 12Cl

CAS Registry Number: 106018-85-3

Molecular Formula: $\text{C}_5\text{H}_{13}\text{ClO}_2\text{SSi}$

Molecular Weight: 200.761

Accurate Mass: 200.009404

Percentage Composition: C 29.91%; H 6.53%; Cl 17.66%; O 15.94%; S 15.97%; Si 13.99%

Source/Synthesis: Synth. from the Na salt + PCl_5 in CCl_4

Use/Importance: Reagent for protection of amines

References:

Weinreb, S.M. *et al.*, *Tet. Lett.*, 1986, **27**, 2099, (*derivs*, *synth*)