



>>Entry Name: (3-Aminopropyl)trimethoxysilane

Synonym(s): 3-(Trimethoxysilyl)-1-propanamine, 9CI

CAS Registry Number: 13822-56-5

(MeO)<sub>3</sub>SiCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>

Molecular Formula: C<sub>6</sub>H<sub>17</sub>NO<sub>3</sub>Si

Molecular Weight: 179.291

Accurate Mass: 179.097771

Percentage Composition: C 40.20%; H 9.56%; N 7.81%; O 26.77%; Si 15.66%

Source/Synthesis: Synth. from (MeO)<sub>3</sub>SiH and H<sub>2</sub>C=CHCH<sub>2</sub>NH<sub>2</sub> in presence of H<sub>2</sub>PtCl<sub>6</sub>

Use/Importance: Coupling agent in filled composites

Physical Description: Liq.

Boiling Point: Bp<sub>30</sub> 104°

Density: d<sub>4</sub><sup>25</sup> 1.01

Refractive Index: n<sub>D</sub><sup>25</sup> 1.4188

Aldrich: 28177-8

Fluka: 9326

Sigma: A1435

>>Derivative: N-Me

CAS Registry Number: 3069-25-8

Molecular Formula: C<sub>7</sub>H<sub>19</sub>NO<sub>3</sub>Si

Molecular Weight: 193.318

Accurate Mass: 193.113421

Percentage Composition: C 43.49%; H 9.91%; N 7.25%; O 24.83%; Si 14.53%

Physical Description: Liq.

Boiling Point: Bp<sub>30</sub> 106°

Density: d<sub>4</sub><sup>25</sup> 0.98

Refractive Index: n<sub>D</sub><sup>25</sup> 1.4194

#### References:

*Aldrich Library of FT-IR Spectra: Vapor Phase*, 1989, **3**, 1654D, (*ir*)

*Fr. Pat.*, 1970, 1 589 935; *CA*, **74**, 22998, (*synth*)

Speier, J.L. *et al.*, *J.O.C.*, 1971, **36**, 3120-3126, (*N-Me*)

*U.K. Pat.*, 1971, 1 238 875; *CA*, **75**, 98670, (*synth*)

Han, C.D. *et al.*, *Polym. Eng. Sci.*, 1981, **21**, 196; *CA*, **94**, 122479, (*use*)