



>>Entry Name: Ethylsilanetriol, 9CI

Synonym(s): Ethyltrihydroxysilane

CAS Registry Number: 5651-16-1

Related CAS Registry Numbers(s): 20262-90-2

EtSi(OH)₃

Molecular Formula: C₂H₈O₃Si

Molecular Weight: 108.169

Accurate Mass: 108.024272

Percentage Composition: C 22.21%; H 7.45%; O 44.37%; Si 25.96%

>>Derivative: Tri-Ac

Synonym(s): Triacetoxylethylsilane

CAS Registry Number: 17689-77-9

Molecular Formula: C₈H₁₄O₆Si

Molecular Weight: 234.281

Accurate Mass: 234.055967

Percentage Composition: C 41.01%; H 6.02%; O 40.97%; Si 11.99%

Use/Importance: Cross-linking agent for polymers

Boiling Point: Bp₄ 97-99°

Density: d₄²⁵ 1.14

Refractive Index: n_D²⁰ 1.4123

>>Derivative: Tri-Me ether

Synonym(s): Ethyltrimethoxysilane, 9CI, 8CI

CAS Registry Number: 5314-55-6

Molecular Formula: C₅H₁₄O₃Si

Molecular Weight: 150.249

Accurate Mass: 150.071222

Percentage Composition: C 39.97%; H 9.39%; O 31.95%; Si 18.69%

Use/Importance: Polymer crosslinking agent. Vulcanising agent

Physical Description: Moisture-sensitive oil

Boiling Point: Bp₂₀ 124°

Density: d₄²⁰ 0.95

Refractive Index: n_D²⁰ 1.3838

References:

Schuyten, H.A. *et al.*, *J.A.C.S.*, 1947, **69**, 2110-2112, (*tri-Ac*)

Okawara, R., *Bull. Chem. Soc. Jpn.*, 1955, **28**, 360-363; 364-366, (*tri-Me ether*)

Dolgov, B.N. *et al.*, *Zh. Obshch. Khim.*, 1957, **27**, 1593-1599, (*tri-Ac*)

Ostdick, T. *et al.*, *Inorg. Chem.*, 1967, **6**, 98-100, (*tri-Me ether*, *pmr*)

U.S. Pat., 1993, 5 238 988; *CA*, **119**, 273230x, (*tri-Ac*, *use*)