Silane, triethoxymethyl-

Other names:	A 162
	CM9050
	Dynasylan MTES
	ICI-EP 5850
	MTES
	Methaneorthosiliconic acid, triethyl ester
	Methyl triethoxysilane
	NSC 5226
	Silane, methyltriethoxy-
	Triethoxymethylsilane
	Triethoxysilylmethane
	Union carbide a-162
	triethoxy(methyl)silane
Inchi:	InChI=1S/C7H18O3Si/c1-5-8-11(4,9-6-2)10-7-3/h5-7H2,1-4H3
InchiKey:	CPUDPFPXCZDNGI-UHFFFAOYSA-N
Formula:	C7H18O3Si
SMILES:	CCO[Si](C)(OCC)OCC
Mol. weight [g/mol]:	178.30
CAS:	2031-67-6

Physical Properties

Property code	Value	Unit	Source
hvap	45.10 ± 0.40	kJ/mol	NIST Webbook
hvap	45.10 ± 0.70	kJ/mol	NIST Webbook
log10ws	0.77		Crippen Method
logp	1.665		Crippen Method
rinpol	772.00		NIST Webbook
rinpol	772.00		NIST Webbook
rinpol	772.00		NIST Webbook
tb	415.00 ± 1.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

hvapt	45.20	kJ/mol	344.00	NIST Webbook
rhol	900.23	kg/m3	288.15	Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures
rhol	889.62	kg/m3	298.15	Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures
rhol	878.98	kg/m3	308.15	Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures
rhol	868.22	kg/m3	318.15	Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures
rhol	857.21	kg/m3	328.15	Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Thermophysical properties of binary mixtures of triethoxysilane, methyltriethoxysilane, vinyltriethoxysilane and 3-mercaptopropyltriethoxysilane with ethylbenzene at various temperatures:	https://www.doi.org/10.1016/j.jct.2014.03.003
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2031676&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hvap:	Enthalpy of vaporization at standard conditions
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
rhol:	Liquid Density
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature