Benzene, (triethoxymethyl)-

Other names:	Orthobenzoic acid, triethyl ester
	Ethyl orthobenzoate
	Triethyl orthobenzoate
	(triethoxymethyl)benzene
Inchi:	InChI=1S/C13H20O3/c1-4-14-13(15-5-2,16-6-3)12-10-8-7-9-11-12/h7-11H,4-6H2,1-3H3
InchiKey:	BQFPCTXLBRVFJL-UHFFFAOYSA-N
Formula:	C13H20O3
SMILES:	CCOC(OCC)(OCC)c1ccccc1
Mol. weight [g/mol]:	224.30
CAS:	1663-61-2

Physical Properties

Property code	Value	Unit	Source
gf	-141.17	kJ/mol	Joback Method
hf	-480.53	kJ/mol	Joback Method
hfus	19.62	kJ/mol	Joback Method
hvap	52.74	kJ/mol	Joback Method
log10ws	-2.79		Crippen Method
logp	2.906		Crippen Method
mcvol	187.880	ml/mol	McGowan Method
pc	2129.52	kPa	Joback Method
tb	513.20	K	NIST Webbook
tc	790.45	K	Joback Method
tf	331.80	K	Joback Method
vc	0.699	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	477.72	J/mol×K	587.55	Joback Method
cpg	554.90	J/mol×K	756.63	Joback Method
cpg	541.27	J/mol×K	722.82	Joback Method
cpg	526.76	J/mol×K	689.00	Joback Method
cpg	511.34	J/mol×K	655.18	Joback Method

cpg	495.00	J/mol×K	621.37	Joback Method
cpg	567.66	J/mol×K	790.45	Joback Method
dvisc	0.0000923	Pa×s	587.55	Joback Method
dvisc	0.0001233	Pa×s	544.92	Joback Method
dvisc	0.0001730	Pa×s	502.30	Joback Method
dvisc	0.0002584	Pa×s	459.67	Joback Method
dvisc	0.0004191	Pa×s	417.05	Joback Method
dvisc	0.0007588	Pa×s	374.43	Joback Method
dvisc	0.0016002	Pa×s	331.80	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1663612&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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