

Triethoxymethane

Inchi:	InChI=1S/C7H16O3/c1-4-8-7(9-5-2)10-6-3/h7H,4-6H2,1-3H3
InchiKey:	GKASDNZWUGIAMG-UHFFFAOYSA-N
Formula:	C7H16O3
SMILES:	CCOC(OCC)OCC
Mol. weight [g/mol]:	148.20
CAS:	108055-42-1

Physical Properties

Property code	Value	Unit	Source
chl	-4362.80 ± 1.10	kJ/mol	NIST Webbook
gf	-309.38	kJ/mol	Joback Method
hf	-630.60 ± 1.50	kJ/mol	NIST Webbook
hfl	-678.40 ± 1.50	kJ/mol	NIST Webbook
hfus	13.93	kJ/mol	Joback Method
hvap	47.80 ± 0.10	kJ/mol	NIST Webbook
hvap	47.80	kJ/mol	NIST Webbook
log10ws	-1.12		Crippen Method
logp	1.380		Crippen Method
mcvol	127.100	ml/mol	McGowan Method
pc	2676.31	kPa	Joback Method
tb	426.38	K	Joback Method
tc	595.08	K	Joback Method
tf	220.34	K	Joback Method
vc	0.475	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	266.07	J/mol×K	426.38	Joback Method
cpg	277.52	J/mol×K	454.50	Joback Method
cpg	288.72	J/mol×K	482.61	Joback Method
cpg	299.67	J/mol×K	510.73	Joback Method
cpg	310.35	J/mol×K	538.85	Joback Method
cpg	320.76	J/mol×K	566.96	Joback Method

cpg	330.86	J/mol×K	595.08	Joback Method
dvisc	0.0033654	Paxs	220.34	Joback Method
dvisc	0.0014520	Paxs	254.68	Joback Method
dvisc	0.0007650	Paxs	289.02	Joback Method
dvisc	0.0004618	Paxs	323.36	Joback Method
dvisc	0.0003071	Paxs	357.70	Joback Method
dvisc	0.0002194	Paxs	392.04	Joback Method
dvisc	0.0001655	Paxs	426.38	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=C108055421&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

chl:	Standard liquid enthalpy of combustion
cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfl:	Liquid phase 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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