Propane, 1,1'-[methylenebis(oxy)]bis[2-methyl-

Other names:	Methane, diisobutoxy-
	Diisobutyloxymethane
	Propane, 1,1'-[methylenebis(oxy)]bis*2-methyl-
	Diisobutoxymethane
	Methane, diisobutyloxy
	Propane, 2-methyl-1-[(2-methylpropoxy)methoxy]-
Inchi:	InChI=1S/C9H20O2/c1-8(2)5-10-7-11-6-9(3)4/h8-9H,5-7H2,1-4H3
InchiKey:	LVRIOILOUAJGGN-UHFFFAOYSA-N
Formula:	C9H20O2
SMILES:	CC(C)COCOCC(C)C
Mol. weight [g/mol]:	160.25
CAS:	2568-91-4

Physical Properties

Property code	Value	Unit	Source
gf	-189.98	kJ/mol	Joback Method
hf	-504.09	kJ/mol	Joback Method
hfus	14.40	kJ/mol	Joback Method
hvap	39.67	kJ/mol	Joback Method
log10ws	-1.78		Crippen Method
logp	2.289		Crippen Method
mcvol	149.410	ml/mol	McGowan Method
pc	2267.57	kPa	Joback Method
rinpol	930.00		NIST Webbook
rinpol	944.00		NIST Webbook
rinpol	930.00		NIST Webbook
tb	449.28	K	Joback Method
tc	619.70	K	Joback Method
tf	205.65	K	Joback Method
vc	0.564	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	324.90	J/mol×K	449.28	Joback Method
cpg	339.18	J/mol×K	477.68	Joback Method
cpg	353.03	J/mol×K	506.09	Joback Method
cpg	366.43	J/mol×K	534.49	Joback Method
cpg	379.40	J/mol×K	562.89	Joback Method
cpg	391.92	J/mol×K	591.30	Joback Method
cpg	403.99	J/mol×K	619.70	Joback Method
dvisc	0.0081421	Pa×s	205.65	Joback Method
dvisc	0.0024899	Pa×s	246.25	Joback Method
dvisc	0.0010648	Pa×s	286.86	Joback Method
dvisc	0.0005622	Pa×s	327.47	Joback Method
dvisc	0.0003417	Pa×s	368.07	Joback Method
dvisc	0.0002293	Pa×s	408.67	Joback Method
dvisc	0.0001654	Pa×s	449.28	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
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=C2568914&Units=SI

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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume