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

Other names:	Methane, diisopropoxy-
	Diisopropoxymethane
	Diisopropyl formal
	Formaldehyde diisopropyl acetal
	Isopropylal
Inchi:	InChI=1S/C7H16O2/c1-6(2)8-5-9-7(3)4/h6-7H,5H2,1-4H3
InchiKey:	WDEVXRIFJZNMKM-UHFFFAOYSA-N
Formula:	C7H16O2
SMILES:	CC(C)OCOC(C)C
Mol. weight [g/mol]:	132.20
CAS:	2568-89-0

Physical Properties

Property code	Value	Unit	Source
gf	-206.82	kJ/mol	Joback Method
hf	-462.81	kJ/mol	Joback Method
hfus	9.22	kJ/mol	Joback Method
hvap	35.22	kJ/mol	Joback Method
log10ws	-1.65		Crippen Method
logp	1.794		Crippen Method
mcvol	121.230	ml/mol	McGowan Method
pc	2746.90	kPa	Joback Method
rinpol	742.00		NIST Webbook
rinpol	742.00		NIST Webbook
tb	410.40 ± 0.60	K	NIST Webbook
tc	575.91	K	Joback Method
tf	183.11	K	Joback Method
vc	0.452	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	242.27	J/mol×K	403.52	Joback Method
cpg	298.81	J/mol×K	547.18	Joback Method

cpg	288.15	J/mol×K	518.45	Joback Method
cpg	277.17	J/mol×K	489.72	Joback Method
cpg	265.86	J/mol×K	460.98	Joback Method
cpg	254.22	J/mol×K	432.25	Joback Method
cpg	309.12	J/mol×K	575.91	Joback Method
dvisc	0.0001850	Pa×s	403.52	Joback Method
dvisc	0.0002547	Pa×s	366.78	Joback Method
dvisc	0.0003767	Pa×s	330.05	Joback Method
dvisc	0.0006145	Pa×s	293.31	Joback Method
dvisc	0.0011530	Pa×s	256.58	Joback Method
dvisc	0.0026699	Pa×s	219.84	Joback Method
dvisc	0.0086595	Pa×s	183.11	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=C2568890&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