

2-[Dimethyl(amino)]-2-(methyloxymethyl)propane

Other names: 1,3-Dimethoxy-2-(methoxymethyl)-N,N-dimethylpropan-2-amine
dimethyl ether
Inchi: InChI=1S/C9H21NO3/c1-10(2)9(6-11-3,7-12-4)8-13-5/h6-8H2,1-5H3
InchiKey: OTMPNUOOWQHUMJ-UHFFFAOYSA-N
Formula: C9H21NO3
SMILES: COCC(COC)(COC)N(C)C
Mol. weight [g/mol]: 191.27

Physical Properties

Property code	Value	Unit	Source
gf	-176.48	kJ/mol	Joback Method
hf	-566.97	kJ/mol	Joback Method
hfus	18.24	kJ/mol	Joback Method
hvap	43.61	kJ/mol	Joback Method
log10ws	0.47		Crippen Method
logp	0.226		Crippen Method
mcvol	165.260	ml/mol	McGowan Method
pc	2233.41	kPa	Joback Method
tb	481.79	K	Joback Method
tc	653.12	K	Joback Method
tf	292.77	K	Joback Method
vc	0.601	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	386.53	J/molxK	481.79	Joback Method
cpg	401.81	J/molxK	510.34	Joback Method
cpg	416.52	J/molxK	538.90	Joback Method
cpg	430.65	J/molxK	567.45	Joback Method
cpg	444.21	J/molxK	596.01	Joback Method
cpg	457.22	J/molxK	624.56	Joback Method
cpg	469.66	J/molxK	653.12	Joback Method

Sources

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=U378698&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
h vap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
m cvol:	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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