N,N-Dimethylformamide dipropyl acetal

Other names:	N,N-Dimethylformamide di-n-propyl acetal Methanamine, N,N-dimethyl-1,1-dipropoxy- 1,1-dipropoxytrimethylamine
Inchi:	InChI=1S/C9H21NO2/c1-5-7-11-9(10(3)4)12-8-6-2/h9H,5-8H2,1-4H3
InchiKey:	NSLGQFIDCADTAS-UHFFFAOYSA-N
Formula:	C9H21NO2
SMILES:	CCCOC(OCCC)N(C)C
Mol. weight [g/mol]:	175.27
CAS:	6006-65-1

Physical Properties

Property code	Value	Unit	Source
gf	-76.76	kJ/mol	Joback Method
hf	-431.28	kJ/mol	Joback Method
hfus	20.94	kJ/mol	Joback Method
hvap	42.10	kJ/mol	Joback Method
log10ws	-1.44		Crippen Method
logp	1.685		Crippen Method
mcvol	159.390	ml/mol	McGowan Method
pc	2246.13	kPa	Joback Method
tb	462.16	K	Joback Method
tc	627.61	K	Joback Method
tf	253.12	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	357.33	J/mol×K	462.16	Joback Method
cpg	372.10	J/mol×K	489.74	Joback Method
cpg	386.38	J/mol×K	517.31	Joback Method
cpg	400.17	J/mol×K	544.89	Joback Method
cpg	413.46	J/mol×K	572.46	Joback Method
cpg	426.27	J/mol×K	600.04	Joback Method

cpg	438.60	J/mol×K	627.61	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	340.70	K	1.90	NIST Webbook

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6006651&Units=SI
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

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
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
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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