N,N-Dimethylformamide di-n-butylacetal

Other names:	N,N-Dimethylformamide dibutyl acetal Methanamine, 1,1-dibutoxy-N,N-dimethyl- Dibutoxy-N,N-dimethylmethanamine 1,1-dibutoxytrimethylamine
Inchi:	InChI=1S/C11H25NO2/c1-5-7-9-13-11(12(3)4)14-10-8-6-2/h11H,5-10H2,1-4H3
InchiKey:	GSFFXKGTGPMVLM-UHFFFAOYSA-N
Formula:	C11H25NO2
SMILES:	CCCCOC(OCCCC)N(C)C
Mol. weight [g/mol]:	203.32
CAS:	18503-90-7

Physical Properties

Property code	Value	Unit	Source
gf	-59.92	kJ/mol	Joback Method
hf	-472.56	kJ/mol	Joback Method
hfus	26.12	kJ/mol	Joback Method
hvap	46.55	kJ/mol	Joback Method
log10ws	-2.27		Crippen Method
logp	2.465		Crippen Method
mcvol	187.570	ml/mol	McGowan Method
pc	1887.08	kPa	Joback Method
rinpol	1216.00		NIST Webbook
tb	507.92	K	Joback Method
tc	671.51	K	Joback Method
tf	275.66	K	Joback Method
vc	0.700	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	451.31	J/mol×K	507.92	Joback Method
cpg	467.72	J/mol×K	535.18	Joback Method
cpg	483.55	J/mol×K	562.45	Joback Method
cpg	498.81	J/mol×K	589.71	Joback Method

cpg	513.49	J/mol×K	616.98	Joback Method
cpg	527.60	J/mol×K	644.24	Joback Method
cpg	541.15	J/mol×K	671.51	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C18503907&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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume