N,N-Dimethylnonamide

Other names: Nonanamide, N,N-dimethyl-
Inchi: InChI=1S/C11H23NO/c1-4-5-6-7-8-9-10-11(13)12(2)3/h4-10H2,1-3H3
InchiKey: DMLHJLWUADABON-UHFFFAOYSA-N
Formula: C11H23NO
SMILES: CCCCCCCCC(=O)N(C)C
Mol. weight [g/mol]: 185.31
CAS: 6225-08-7

Physical Properties

Property code	Value	Unit	Source
chl	-7165.10 ± 2.20	kJ/mol	NIST Webbook
gf	23.60	kJ/mol	Joback Method
hf	-374.00	kJ/mol	NIST Webbook
hfus	28.87	kJ/mol	Joback Method
hvap	76.57	kJ/mol	NIST Webbook
log10ws	-2.77		Crippen Method
logp	2.825		Crippen Method
mcvol	177.400	ml/mol	McGowan Method
pc	2041.91	kPa	Joback Method
tb	517.39	K	Joback Method
tc	687.29	K	Joback Method
tf	296.13	K	Joback Method
vc	0.675	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	423.40	J/mol×K	517.39	Joback Method
cpg	439.24	J/mol×K	545.71	Joback Method
cpg	454.41	J/mol×K	574.02	Joback Method
cpg	468.91	J/mol×K	602.34	Joback Method
cpg	482.76	J/mol×K	630.66	Joback Method
cpg	496.00	J/mol×K	658.97	Joback Method
cpg	508.63	J/mol×K	687.29	Joback Method

hvapt	69.30	kJ/mol	460.00	NIST Webbook

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=C6225087&Units=SI

Legend

chl:	Standard liquid enthalpy of combustion
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
hvapt:	Enthalpy of vaporization at a given temperature
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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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