1-Decanamine, N,N-dimethyl-

Other names:	Decylamine, N,N-dimethyl-
	Decyldimethylamine
	Dimethyl-n-decylamine
	N,N-Dimethyl-N-decylamine
	N,N-Dimethyldecylamine
Inchi:	InChI=1S/C12H27N/c1-4-5-6-7-8-9-10-11-12-13(2)3/h4-12H2,1-3H3
InchiKey:	YWWNNLPSZSEZNZ-UHFFFAOYSA-N
Formula:	C12H27N
SMILES:	CCCCCCCCCCN(C)C
Mol. weight [g/mol]:	185.35
CAS:	1120-24-7

Physical Properties

Property code	Value	Unit	Source
gf	160.94	kJ/mol	Joback Method
hf	-223.48	kJ/mol	Joback Method
hfus	29.86	kJ/mol	Joback Method
hvap	44.35	kJ/mol	Joback Method
log10ws	-3.42		Crippen Method
logp	3.689		Crippen Method
mcvol	189.920	ml/mol	McGowan Method
pc	1777.34	kPa	Joback Method
rinpol	1292.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1293.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1292.00		NIST Webbook
rinpol	1293.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1298.00		NIST Webbook
rinpol	1292.00		NIST Webbook

rinpol	1294.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1293.00		NIST Webbook
rinpol	1293.00		NIST Webbook
rinpol	1293.00		NIST Webbook
rinpol	1292.00		NIST Webbook
tb	507.15 ± 3.00	K	NIST Webbook
tc	646.21	K	Joback Method
tf	257.47	K	Joback Method
vc	0.726	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	441.92	J/mol×K	486.40	Joback Method
cpg	459.32	J/mol×K	513.04	Joback Method
cpg	476.04	J/mol×K	539.67	Joback Method
cpg	492.09	J/mol×K	566.31	Joback Method
cpg	507.50	J/mol×K	592.94	Joback Method
cpg	522.28	J/mol×K	619.58	Joback Method
cpg	536.45	J/mol×K	646.21	Joback Method
hvapt	55.20	kJ/mol	484.50	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1120247&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
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume