DIMETHYLNONYLAMINE

Other names: Dimethyl n-nonyl amine
Inchi: InChI=1S/C11H25N/c1-4-5-6-7-8-9-10-11-12(2)3/h4-11H2,1-3H3
InchiKey: AMAADDMFZSZCNT-UHFFFAOYSA-N
Formula: C11H25N
SMILES: CCCCCCCCCN(C)C
Mol. weight [g/mol]: 171.33
CAS: 17373-27-2

Physical Properties

Property code	Value	Unit	Source
af	0.5487		Cheméo Relay (1.0)
gf	152.52	kJ/mol	Joback Method
hf	-203.47	kJ/mol	Cheméo Relay (1.0)
hfus	27.27	kJ/mol	Joback Method
hvap	55.96	kJ/mol	Cheméo Relay (1.0)
ie	8.07	eV	Cheméo Relay (1.0)
log10ws	-3.62		Cheméo Relay (1.0)
logp	3.299		Crippen Method
mcvol	175.830	ml/mol	McGowan Method
pc	1930.44	kPa	Joback Method
tb	482.33	K	Cheméo Relay (1.0)
tc	642.55	K	Cheméo Relay (1.0)
tf	233.83	K	Cheméo Relay (1.0)
vc	0.696	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	393.80	J/mol×K	463.52	Joback Method
cpg	410.50	J/mol×K	490.27	Joback Method
cpg	426.56	J/mol×K	517.03	Joback Method
cpg	441.98	J/mol×K	543.78	Joback Method
cpg	456.78	J/mol×K	570.54	Joback Method
cpg	470.99	J/mol×K	597.29	Joback Method

cpg	484.61	J/mol×K	624.04	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.71746e+01
Coeff. B	-4.99288e+03
Coeff. C	-7.68560e+01
Temperature range (K), min.	372.52
Temperature range (K), max.	497.73

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C17373272&Units=SI

Legend

af: Acentric Factor

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

ie: Ionization energy

log10ws: Log10 of Water solubility in mol/l

logp: Octanol/Water partition coefficient

mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume