

1-Nonanamine, N,N-dimethyl-

Other names:	Dimethyl n-nonyl amine Dimethylnonylamine
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]:	171.32
CAS:	17373-27-2

Physical Properties

Property code	Value	Unit	Source
gf	152.52	kJ/mol	Joback Method
hf	-202.84	kJ/mol	Joback Method
hfus	27.27	kJ/mol	Joback Method
hvap	42.12	kJ/mol	Joback Method
log10ws	-3.00		Crippen Method
logp	3.299		Crippen Method
mcvol	175.830	ml/mol	McGowan Method
pc	1930.44	kPa	Joback Method
tb	463.52	K	Joback Method
tc	624.04	K	Joback Method
tf	246.20	K	Joback Method
vc	0.669	m3/kmol	Joback Method

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	$\ln(P_{vp}) = A + B/(T + C)$
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C17373272&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf: Normal melting (fusion) point
vc: Critical Volume

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