

N,N'-Diisopropylethylenediamine

Other names:	1,2-Ethanediamine, N,N'-bis(1-methylethyl)- N,N'-Disopropylethylene diamine
Inchi:	InChI=1S/C8H20N2/c1-7(2)9-5-6-10-8(3)4/h7-10H,5-6H2,1-4H3
InchiKey:	MFIGJRRHGZYPDD-UHFFFAOYSA-N
Formula:	C8H20N2
SMILES:	CC(C)NCCNC(C)C
Mol. weight [g/mol]:	144.26
CAS:	4013-94-9

Physical Properties

Property code	Value	Unit	Source
gf	190.38	kJ/mol	Joback Method
hf	-112.07	kJ/mol	Joback Method
hfus	19.63	kJ/mol	Joback Method
hvap	45.50	kJ/mol	Joback Method
log10ws	-1.77		Crippen Method
logp	0.982		Crippen Method
mvol	143.540	ml/mol	McGowan Method
pc	2646.11	kPa	Joback Method
tb	443.70	K	NIST Webbook
tc	661.14	K	Joback Method
tf	255.24	K	Joback Method
vc	0.541	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	329.12	J/molxK	481.90	Joback Method
cpg	343.85	J/molxK	511.77	Joback Method
cpg	357.96	J/molxK	541.65	Joback Method
cpg	371.45	J/molxK	571.52	Joback Method
cpg	384.33	J/molxK	601.39	Joback Method
cpg	396.63	J/molxK	631.27	Joback Method
cpg	408.37	J/molxK	661.14	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.56159e+01
Coeff. B	-4.17196e+03
Coeff. C	-6.43460e+01
Temperature range (K), min.	325.15
Temperature range (K), max.	469.22

Sources

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/ci9903071
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=C4013949&Units=SI

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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