N-Isopropylethylenediamine

Other names:	1,2-Ethanediamine, N-(1-methylethyl)- 2-Isopropylaminoethylamine Ethylenediamine, N-isopropyl- Isopropylaminoethylamine
Inchi:	InChI=1S/C5H14N2/c1-5(2)7-4-3-6/h5,7H,3-4,6H2,1-2H3
InchiKey:	KDRUIMNNZBMLJR-UHFFFAOYSA-N
Formula:	C5H14N2
SMILES:	CC(C)NCCN
Mol. weight [g/mol]:	102.18
CAS:	19522-67-9

Physical Properties

Property code	Value	Unit	Source
gf	144.62	kJ/mol	Joback Method
hf	-64.55	kJ/mol	Joback Method
hfus	15.48	kJ/mol	Joback Method
hvap	43.41	kJ/mol	Joback Method
log10ws	-0.65		Crippen Method
logp	-0.057		Crippen Method
mcvol	101.270	ml/mol	McGowan Method
pc	3810.39	kPa	Joback Method
tb	436.06	K	Joback Method
tc	625.73	K	Joback Method
tf	267.03	K	Joback Method
vc	0.373	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	213.99	J/mol×K	436.06	Joback Method
cpg	225.21	J/mol×K	467.67	Joback Method
cpg	235.94	J/mol×K	499.28	Joback Method
cpg	246.19	J/mol×K	530.89	Joback Method
cpg	255.97	J/mol×K	562.51	Joback Method

cpg	265.30	J/mol×K	594.12	Joback Method
cpg	274.20	J/mol×K	625.73	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.50750e+01
Coeff. B	-3.76229e+03
Coeff. C	-5.48940e+01
Temperature range (K), min.	309.32
Temperature range (K), max.	440.24

Sources

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=C19522679&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

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