2-Propanamine, N-ethyl-

Other names:	(C2H5)(i-C3H7)NH
	(CH3)2CHNHCH2CH3
	Diethylamine, 1-methyl-
	Ethylisopropylamine
	Isopropylamine, N-ethyl-
	N-Ethyl-N-isopropylamine
	N-Ethylisopropylamine
	isopropylethylamine
Inchi:	InChI=1S/C5H13N/c1-4-6-5(2)3/h5-6H,4H2,1-3H3
InchiKey:	RIVIDPPYRINTTH-UHFFFAOYSA-N
Formula:	C5H13N
SMILES:	CCNC(C)C
Mol. weight [g/mol]:	87.16
CAS:	19961-27-4

Physical Properties

Property code	Value	Unit	Source
affp	960.00	kJ/mol	NIST Webbook
basg	926.70	kJ/mol	NIST Webbook
gf	78.17	kJ/mol	Joback Method
hf	-98.34	kJ/mol	Joback Method
hfus	10.28	kJ/mol	Joback Method
hvap	33.25	kJ/mol	NIST Webbook
hvap	33.10 ± 0.10	kJ/mol	NIST Webbook
log10ws	-1.22		Crippen Method
logp	1.004		Crippen Method
mcvol	91.290	ml/mol	McGowan Method
pc	3555.77	kPa	Joback Method
rinpol	603.00		NIST Webbook
tb	342.80	K	NIST Webbook
tb	355.15 ± 1.50	K	NIST Webbook
tc	508.00	K	NIST Webbook
tf	183.77	K	Joback Method
vc	0.344	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	162.53	J/mol×K	363.53	Joback Method
cpg	172.97	J/mol×K	392.59	Joback Method
cpg	183.01	J/mol×K	421.64	Joback Method
cpg	192.67	J/mol×K	450.70	Joback Method
cpg	201.96	J/mol×K	479.75	Joback Method
cpg	210.89	J/mol×K	508.81	Joback Method
cpg	219.45	J/mol×K	537.86	Joback Method
hvapt	29.94	kJ/mol	342.80	NIST Webbook
hvapt	32.10 ± 0.10	kJ/mol	313.00	NIST Webbook
hvapt	31.00 ± 0.10	kJ/mol	328.00	NIST Webbook
hvapt	28.80 ± 0.10	kJ/mol	358.00	NIST Webbook
hvapt	33.40	kJ/mol	322.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.46955e+01
Coeff. B	-2.64956e+03
Coeff. C	-7.98730e+01
Temperature range (K), min.	263.77
Temperature range (K), max.	362.22

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=C19961274&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

affp:	Proton affinity
basg:	Gas basicity
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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume