2-Propanamine, N-methyl-

Other names:	2-Methylaminopropane
	Ethylamine, N,1-dimethyl-
	Isopropylmethylamine
	Methylisopropylamine
	N-Isopropylmethylamine
	N-Methylisopropylamine
Inchi:	InChI=1S/C4H11N/c1-4(2)5-3/h4-5H,1-3H3
InchiKey:	XHFGWHUWQXTGAT-UHFFFAOYSA-N
Formula:	C4H11N
SMILES:	CNC(C)C
Mol. weight [g/mol]:	73.14
CAS:	4747-21-1

Physical Properties

Property code	Value	Unit	Source
affp	952.40	kJ/mol	NIST Webbook
basg	919.40	kJ/mol	NIST Webbook
gf	69.75	kJ/mol	Joback Method
hf	-77.70	kJ/mol	Joback Method
hfus	7.69	kJ/mol	Joback Method
hvap	30.70 ± 0.10	kJ/mol	NIST Webbook
hvap	30.93	kJ/mol	NIST Webbook
log10ws	-0.80		Crippen Method
logp	0.614		Crippen Method
mcvol	77.200	ml/mol	McGowan Method
pc	4000.70	kPa	Joback Method
rinpol	542.00		NIST Webbook
tb	323.50	K	NIST Webbook
tb	324.70	K	NIST Webbook
tc	490.70	K	NIST Webbook
tf	172.50	K	Joback Method
vc	0.288	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	146.07	J/mol×K	398.80	Joback Method
cpg	154.40	J/mol×K	427.87	Joback Method
cpg	162.42	J/mol×K	456.95	Joback Method
cpg	170.14	J/mol×K	486.02	Joback Method
cpg	128.42	J/mol×K	340.65	Joback Method
cpg	137.41	J/mol×K	369.72	Joback Method
cpg	177.55	J/mol×K	515.10	Joback Method
hvapt	28.71	kJ/mol	323.50	NIST Webbook
hvapt	29.50 ± 0.10	kJ/mol	313.00	NIST Webbook
hvapt	27.10 ± 0.10	kJ/mol	343.00	NIST Webbook
hvapt	30.90	kJ/mol	306.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.25026e+01
Coeff. B	-1.54067e+03
Coeff. C	-1.29290e+02
Temperature range (K), min.	255.42
Temperature range (K), max.	343.54

Sources

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

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=C4747211&Units=SI

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

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