1-Octadecanamine, N-methyl-

Other names:	Methyl-n-octadecylamine
	Methyloctadecylamine
	Methylstearylamine
	N-Methyl-1-octadecanamine
	N-Methyl-N-stearylamine
	N-Methyl-n-octadecylamine
	N-Methyloctadecanamine
	N-Methyloctadecylamine
	N-Methylstearylamine
	N-Stearyl-N-methylamine
	NSC 66468
	Octadecylamine, N-methyl-
	Octadecylmethylamine
Inchi:	InChI=1S/C19H41N/c1-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-2/h20H,3-19H2
InchiKey:	SZEGKVHRCLBFKJ-UHFFFAOYSA-N
Formula:	C19H41N
SMILES:	CCCCCCCCCCCCCCCCCCNC
Mol. weight [g/mol]:	283.54
CAS:	2439-55-6

Physical Properties

Property code	Value	Unit	Source
gf	198.49	kJ/mol	Joback Method
hf	-382.02	kJ/mol	Joback Method
hfus	50.07	kJ/mol	Joback Method
hvap	64.32	kJ/mol	Joback Method
log10ws	-6.97		Crippen Method
logp	6.467		Crippen Method
mcvol	288.550	ml/mol	McGowan Method
pc	1089.94	kPa	Joback Method
rinpol	2088.00		NIST Webbook
tb	684.29	K	Joback Method
tc	848.90	K	Joback Method
tf	314.65 ± 2.00	K	NIST Webbook
tf	314.65 ± 2.00	K	NIST Webbook
vc	1.135	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	850.95	J/mol×K	684.29	Joback Method
cpg	871.16	J/mol×K	711.72	Joback Method
cpg	890.51	J/mol×K	739.16	Joback Method
cpg	909.02	J/mol×K	766.59	Joback Method
cpg	926.72	J/mol×K	794.03	Joback Method
cpg	943.63	J/mol×K	821.46	Joback Method
cpg	959.79	J/mol×K	848.90	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.58073e+01
Coeff. B	-5.65798e+03
Coeff. C	-1.13552e+02
Temperature range (K), min.	478.12
Temperature range (K), max.	652.62

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/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=C2439556&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume