1-Octanamine, N-methyl-

Other names:	Methyl n-octyl amine
	Methyloctylamine
	N-Methyl-N-n-octylamine
	N-Methyl-n-octylamine
	N-Methyloctylamine
	N-Octyl-N-methylamine
	Octylamine, N-methyl-
	Octylmethylamine
Inchi:	InChI=1S/C9H21N/c1-3-4-5-6-7-8-9-10-2/h10H,3-9H2,1-2H3
InchiKey:	SEGJNMCIMOLEDM-UHFFFAOYSA-N
Formula:	C9H21N
SMILES:	CCCCCCCCNC
Mol. weight [g/mol]:	143.27
CAS:	2439-54-5

Physical Properties

Property code	Value	Unit	Source
gf	114.29	kJ/mol	Joback Method
hf	-175.62	kJ/mol	Joback Method
hfus	24.16	kJ/mol	Joback Method
hvap	42.06	kJ/mol	Joback Method
log10ws	-2.78		Crippen Method
logp	2.566		Crippen Method
mcvol	147.650	ml/mol	McGowan Method
pc	2336.03	kPa	Joback Method
rinpol	1087.00		NIST Webbook
rinpol	1086.00		NIST Webbook
rinpol	1087.00		NIST Webbook
rinpol	1087.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1087.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1089.00		NIST Webbook

rinpol	1090.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1085.00		NIST Webbook
rinpol	1090.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1089.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1088.00		NIST Webbook
rinpol	1088.00		NIST Webbook
tb	455.49	K	Joback Method
tc	622.89	K	Joback Method
tf	243.85	K	Joback Method
vc	0.575	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	322.73	J/mol×K	455.49	Joback Method
cpg	337.31	J/mol×K	483.39	Joback Method
cpg	351.32	J/mol×K	511.29	Joback Method
cpg	364.79	J/mol×K	539.19	Joback Method
cpg	377.73	J/mol×K	567.09	Joback Method
cpg	390.14	J/mol×K	594.99	Joback Method
cpg	402.06	J/mol×K	622.89	Joback Method
hvapt	49.20	kJ/mol	436.50	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.62386e+01
Coeff. B	-4.48051e+03
Coeff. C	-6.89880e+01
Temperature range (K), min.	349.88
Temperature range (K), max.	479.02

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2439545&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
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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
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