

Dimethyl(2-octyl)amine

Other names:	2-Octanamine, N,N-dimethyl
Inchi:	InChI=1S/C10H23N/c1-5-6-7-8-9-10(2)11(3)4/h10H,5-9H2,1-4H3
InchiKey:	JXXZVUDFXQNPRZ-UHFFFAOYSA-N
Formula:	C10H23N
SMILES:	CCCCCCC(C)N(C)C
Mol. weight [g/mol]:	157.30
CAS:	7378-97-4

Physical Properties

Property code	Value	Unit	Source
gf	141.66	kJ/mol	Joback Method
hf	-187.48	kJ/mol	Joback Method
hfus	21.15	kJ/mol	Joback Method
hvap	39.51	kJ/mol	Joback Method
log10ws	-2.69		Crippen Method
logp	2.907		Crippen Method
mcvol	161.740	ml/mol	McGowan Method
pc	2119.73	kPa	Joback Method
rinpol	1083.00		NIST Webbook
rinpol	1083.00		NIST Webbook
tb	440.20	K	Joback Method
tc	604.82	K	Joback Method
tf	219.93	K	Joback Method
vc	0.608	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	347.56	J/molxK	440.20	Joback Method
cpg	363.91	J/molxK	467.64	Joback Method
cpg	379.60	J/molxK	495.07	Joback Method
cpg	394.66	J/molxK	522.51	Joback Method
cpg	409.10	J/molxK	549.94	Joback Method
cpg	422.95	J/molxK	577.38	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C7378974&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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

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