3,3-Dimethylbutylamine

Other names: 1-Butanamine, 3,3-dimethyl-
Inchi: InChI=1S/C6H15N/c1-6(2,3)4-5-7/h4-5,7H2,1-3H3
InchiKey: GPWHFPWZAPOYNO-UHFFFAOYSA-N
Formula: C6H15N
SMILES: CC(C)(C)CCN
Mol. weight [g/mol]: 101.19
CAS: 15673-00-4

Physical Properties

Property code	Value	Unit	Source
gf	68.93	kJ/mol	Joback Method
hf	-142.13	kJ/mol	Joback Method
hfus	9.08	kJ/mol	Joback Method
hvap	38.30	kJ/mol	Joback Method
log10ws	-1.53		Crippen Method
logp	1.381		Crippen Method
mcvol	105.380	ml/mol	McGowan Method
pc	3388.08	kPa	Joback Method
tb	388.20	K	NIST Webbook
tc	598.02	K	Joback Method
tf	243.06	K	Joback Method
vc	0.390	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	212.86	J/mol×K	405.98	Joback Method
cpg	225.70	J/mol×K	437.99	Joback Method
cpg	237.86	J/mol×K	469.99	Joback Method
cpg	249.37	J/mol×K	502.00	Joback Method
cpg	260.26	J/mol×K	534.01	Joback Method
cpg	270.57	J/mol×K	566.02	Joback Method
cpg	280.31	J/mol×K	598.02	Joback Method

Sources

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=C15673004&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume