2-Propanamine, N,N,2-trimethyl-

Other names: t-C4H9N(CH3)2
N,N-Dimethyl-t-butylamine
Inchi: InChI=1S/C6H15N/c1-6(2,3)7(4)5/h1-5H3
InchiKey: OXQMIXBVXHWDPX-UHFFFAOYSA-N
Formula: C6H15N
SMILES: CN(C)C(C)(C)C
Mol. weight [g/mol]: 101.19
CAS: 918-02-5

Physical Properties

Property code	Value	Unit	Source
affp	979.60	kJ/mol	NIST Webbook
basg	948.60	kJ/mol	NIST Webbook
gf	113.26	kJ/mol	Joback Method
hf	-108.39	kJ/mol	Joback Method
hfus	6.90	kJ/mol	Joback Method
hvap	34.80	kJ/mol	NIST Webbook
ie	8.08	eV	NIST Webbook
log10ws	-1.02		Crippen Method
logp	1.347		Crippen Method
mcvol	105.380	ml/mol	McGowan Method
pc	3166.83	kPa	Joback Method
rinpol	693.00		NIST Webbook
rinpol	693.00		NIST Webbook
tb	362.80 ± 1.50	K	NIST Webbook
tb	362.15 ± 2.00	K	NIST Webbook
tb	363.80 ± 1.00	K	NIST Webbook
tb	362.65 ± 2.00	K	NIST Webbook
tb	363.65 ± 2.00	K	NIST Webbook
tc	519.39	K	Joback Method
tf	183.15 ± 5.00	K	NIST Webbook
vc	0.379	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	183.93	J/mol×K	345.89	Joback Method
cpg	197.42	J/mol×K	374.81	Joback Method
cpg	210.25	J/mol×K	403.72	Joback Method
cpg	222.45	J/mol×K	432.64	Joback Method
cpg	234.02	J/mol×K	461.56	Joback Method
cpg	245.01	J/mol×K	490.48	Joback Method
cpg	255.44	J/mol×K	519.39	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C918025&Units=SI
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

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
ie: Ionization energy
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