Cyclohexanamine, N-(2-methylpropyl)-

Other names: N-isobutylcyclohexylamine
Inchi: InChI=1S/C10H21N/c1-9(2)8-11-10-6-4-3-5-7-10/h9-11H,3-8H2,1-2H3
InchiKey: ARHUUPGCYHESJV-UHFFFAOYSA-N
Formula: C10H21N
SMILES: CC(C)CNC1CCCCC1
Mol. weight [g/mol]: 155.28
CAS: 15443-52-4

Physical Properties

Property code	Value	Unit	Source
gf	144.72	kJ/mol	Joback Method
hf	-147.22	kJ/mol	Joback Method
hfus	15.07	kJ/mol	Joback Method
hvap	44.33	kJ/mol	Joback Method
log10ws	-2.96		Crippen Method
logp	2.565		Crippen Method
mcvol	150.880	ml/mol	McGowan Method
pc	2624.46	kPa	Joback Method
rinpol	1135.00		NIST Webbook
tb	497.48	K	Joback Method
tc	700.99	K	Joback Method
tf	247.50	K	Joback Method
vc	0.557	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	355.48	J/mol×K	497.48	Joback Method
cpg	375.40	J/mol×K	531.40	Joback Method
cpg	394.29	J/mol×K	565.32	Joback Method
cpg	412.17	J/mol×K	599.24	Joback Method
cpg	429.08	J/mol×K	633.15	Joback Method
cpg	445.04	J/mol×K	667.07	Joback Method
cpg	460.08	J/mol×K	700.99	Joback Method

Sources

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=C15443524&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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