Cyclohexanamine, N-(3-methylbutyl)-

Other names: N-(3-methylbutyl)cyclohexylamine
Inchi: InChI=1S/C11H23N/c1-10(2)8-9-12-11-6-4-3-5-7-11/h10-12H,3-9H2,1-2H3
InchiKey: GZYFSWISUVSJGW-UHFFFAOYSA-N
Formula: C11H23N
SMILES: CC(C)CCNC1CCCCC1
Mol. weight [g/mol]: 169.31
CAS: 30249-25-3

Physical Properties

Property code	Value	Unit	Source
gf	153.14	kJ/mol	Joback Method
hf	-167.86	kJ/mol	Joback Method
hfus	17.66	kJ/mol	Joback Method
hvap	46.56	kJ/mol	Joback Method
log10ws	-3.38		Crippen Method
logp	2.955		Crippen Method
mcvol	164.970	ml/mol	McGowan Method
pc	2384.19	kPa	Joback Method
rinpol	1244.00		NIST Webbook
tb	520.36	K	Joback Method
tc	721.02	K	Joback Method
tf	258.77	K	Joback Method
vc	0.614	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	404.51	J/mol×K	520.36	Joback Method
cpg	425.03	J/mol×K	553.80	Joback Method
cpg	444.49	J/mol×K	587.25	Joback Method
cpg	462.92	J/mol×K	620.69	Joback Method
cpg	480.35	J/mol×K	654.14	Joback Method
cpg	496.80	J/mol×K	687.58	Joback Method
cpg	512.32	J/mol×K	721.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C30249253&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
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
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