Hydrazine, 1,1-dimethyl-2-(1-methylpropyl)-

Other names: 1,1-Dimethyl-2-sec-butylhydrazine
Inchi: InChI=1S/C6H16N2/c1-5-6(2)7-8(3)4/h6-7H,5H2,1-4H3
InchiKey: JNQHRUNRCVMHQV-UHFFFAOYSA-N
Formula: C6H16N2
SMILES: CCC(C)NN(C)C
Mol. weight [g/mol]: 116.20
CAS: 54007-24-8

Physical Properties

Property code	Value	Unit	Source
gf	197.37	kJ/mol	Joback Method
hf	-51.45	kJ/mol	Joback Method
hfus	15.89	kJ/mol	Joback Method
hvap	37.04	kJ/mol	Joback Method
log10ws	-1.20		Crippen Method
logp	0.851		Crippen Method
mcvol	115.360	ml/mol	McGowan Method
pc	3173.97	kPa	Joback Method
rinpol	755.00		NIST Webbook
rinpol	755.00		NIST Webbook
tb	398.85	K	Joback Method
tc	571.26	K	Joback Method
tf	227.51	K	Joback Method
vc	0.418	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	227.44	J/mol×K	398.85	Joback Method
cpg	240.35	J/mol×K	427.58	Joback Method
cpg	252.71	J/mol×K	456.32	Joback Method
cpg	264.54	J/mol×K	485.05	Joback Method
cpg	275.86	J/mol×K	513.79	Joback Method
cpg	286.68	J/mol×K	542.52	Joback Method

cpg	297.02	J/mol×K	571.26	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=C54007248&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume