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

Other names: 1,1-di-Isobutylhydrazine
Inchi: InChI=1S/C8H20N2/c1-7(2)5-10(9)6-8(3)4/h7-8H,5-6,9H2,1-4H3
InchiKey: JDAGVHRXQORNKW-UHFFFAOYSA-N
Formula: C8H20N2
SMILES: CC(C)CN(N)CC(C)C
Mol. weight [g/mol]: 144.26
CAS: 16596-38-6

Physical Properties

Property code	Value	Unit	Source
gf	188.83	kJ/mol	Joback Method
hf	-117.69	kJ/mol	Joback Method
hfus	17.65	kJ/mol	Joback Method
hvap	45.31	kJ/mol	Joback Method
ie	7.73 ± 0.05	eV	NIST Webbook
log10ws	-1.68		Crippen Method
logp	1.474		Crippen Method
mcvol	143.540	ml/mol	McGowan Method
pc	2726.86	kPa	Joback Method
tb	466.53	K	Joback Method
tc	649.74	K	Joback Method
tf	265.65	K	Joback Method
vc	0.518	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	325.07	J/mol×K	466.53	Joback Method
cpg	340.34	J/mol×K	497.07	Joback Method
cpg	354.90	J/mol×K	527.60	Joback Method
cpg	368.79	J/mol×K	558.14	Joback Method
cpg	382.01	J/mol×K	588.67	Joback Method
cpg	394.60	J/mol×K	619.21	Joback Method
cpg	406.57	J/mol×K	649.74	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C16596386&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
ie:	Ionization energy
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