Hydrazine, N,N'-dibutyl-N,N'-dimethyl-

Inchi: InChI=1S/C10H24N2/c1-5-7-9-11(3)12(4)10-8-6-2/h5-10H2,1-4H3
InchiKey: HUUBGMAZZGQSLS-UHFFFAOYSA-N
Formula: C10H24N2
SMILES: CCCCN(C)N(C)CCCC
Mol. weight [g/mol]: 172.31
CAS: 116149-14-5

Physical Properties

Property code	Value	Unit	Source
affp	975.90	kJ/mol	NIST Webbook
basg	945.20	kJ/mol	NIST Webbook
gf	254.88	kJ/mol	Joback Method
hf	-114.67	kJ/mol	Joback Method
hfus	27.70	kJ/mol	Joback Method
hvap	41.94	kJ/mol	Joback Method
ie	6.72 ± 0.05	eV	NIST Webbook
log10ws	-2.14		Crippen Method
logp	2.365		Crippen Method
mcvol	171.720	ml/mol	McGowan Method
pc	2100.34	kPa	Joback Method
tb	453.08	K	Joback Method
tc	613.08	K	Joback Method
tf	267.40	K	Joback Method
vc	0.631	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	380.84	J/mol×K	453.08	Joback Method
cpg	397.52	J/mol×K	479.75	Joback Method
cpg	413.52	J/mol×K	506.41	Joback Method
cpg	428.85	J/mol×K	533.08	Joback Method
cpg	443.53	J/mol×K	559.75	Joback Method
cpg	457.59	J/mol×K	586.41	Joback Method

cpg	471.05	J/mol×K	613.08	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C116149145&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume