2,2-Dimethylhydrazyl radical

Inchi: InChI=1S/C2H7N2/c1-4(2)3/h3H,1-2H3
InchiKey: MUKURJUPGRIHBU-UHFFFAOYSA-N
Formula: C2H7N2
SMILES: CN(C)[NH]
Mol. weight [g/mol]: 59.09
CAS: 40613-93-2

Physical Properties

Property code	Value	Unit	Source
gf	218.51	kJ/mol	Joback Method
hf	92.20	kJ/mol	Joback Method
hfus	10.74	kJ/mol	Joback Method
hvap	28.38	kJ/mol	Joback Method
ie	6.60 ± 0.30	eV	NIST Webbook
ie	6.40 ± 0.20	eV	NIST Webbook
log10ws	5.94		Crippen Method
logp	-0.254		Crippen Method
mcvol	56.850	ml/mol	McGowan Method
pc	5446.55	kPa	Joback Method
tb	307.07	K	Joback Method
tc	472.11	K	Joback Method
tf	213.80	K	Joback Method
vc	0.192	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	83.51	J/mol×K	307.07	Joback Method
cpg	90.61	J/mol×K	334.58	Joback Method
cpg	97.29	J/mol×K	362.08	Joback Method
cpg	103.55	J/mol×K	389.59	Joback Method
cpg	109.43	J/mol×K	417.10	Joback Method
cpg	114.94	J/mol×K	444.60	Joback Method
cpg	120.11	J/mol×K	472.11	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C40613932&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

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