Hydrazine, (1-methylethyl)-

Inchi: InChI=1S/C3H10N2/c1-3(2)5-4/h3,5H,4H2,1-2H3
InchiKey: KJAQRHMKLVGSCG-UHFFFAOYSA-N
Formula: C3H10N2
SMILES: CC(C)NN
Mol. weight [g/mol]: 74.12
CAS: 2257-52-5

Physical Properties

Property code	Value	Unit	Source
gf	127.78	kJ/mol	Joback Method
hf	-23.27	kJ/mol	Joback Method
hfus	10.30	kJ/mol	Joback Method
hvap	38.96	kJ/mol	Joback Method
ie	8.42 ± 0.05	eV	NIST Webbook
ie	9.05	eV	NIST Webbook
log10ws	-0.80		Crippen Method
logp	-0.142		Crippen Method
mcvol	73.090	ml/mol	McGowan Method
pc	4903.92	kPa	Joback Method
tb	390.30	K	Joback Method
tc	583.17	K	Joback Method
tf	244.49	K	Joback Method
vc	0.262	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	139.67	J/mol×K	390.30	Joback Method
cpg	148.17	J/mol×K	422.44	Joback Method
cpg	156.32	J/mol×K	454.59	Joback Method
cpg	164.11	J/mol×K	486.73	Joback Method
cpg	171.55	J/mol×K	518.88	Joback Method
cpg	178.65	J/mol×K	551.02	Joback Method
cpg	185.42	J/mol×K	583.17	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2257525&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