

Hydrazine, (1,1-dimethylethyl)-

Other names:	tert-Butylhydrazine
Inchi:	InChI=1S/C4H12N2/c1-4(2,3)6-5/h6H,5H2,1-3H3
InchiKey:	MUQNAPSBHXFMHT-UHFFFAOYSA-N
Formula:	C4H12N2
SMILES:	CC(C)(C)NN
Mol. weight [g/mol]:	88.15
CAS:	32064-67-8

Physical Properties

Property code	Value	Unit	Source
gf	141.48	kJ/mol	Joback Method
hf	-47.38	kJ/mol	Joback Method
hfus	9.00	kJ/mol	Joback Method
hvap	40.28	kJ/mol	Joback Method
ie	8.92	eV	NIST Webbook
log10ws	-1.22		Crippen Method
logp	0.248		Crippen Method
mcvol	87.180	ml/mol	McGowan Method
pc	4368.40	kPa	Joback Method
rinpola	736.00		NIST Webbook
rinpola	736.00		NIST Webbook
tb	410.39	K	Joback Method
tc	610.12	K	Joback Method
tf	273.18	K	Joback Method
vc	0.312	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	177.80	J/molxK	410.39	Joback Method
cpg	188.72	J/molxK	443.68	Joback Method
cpg	199.00	J/molxK	476.97	Joback Method
cpg	208.69	J/molxK	510.26	Joback Method
cpg	217.80	J/molxK	543.55	Joback Method

cpg	226.36	J/mol×K	576.83	Joback Method
cpg	234.41	J/mol×K	610.12	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=C32064678&Units=SI

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
hvac:	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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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