Hydrazine, 2-butenyl-

Other names: Crotylhydrazine
Inchi: InChI=1S/C4H10N2/c1-2-3-4-6-5/h2-3,6H,4-5H2,1H3/b3-2+
InchiKey: SHHBQSBSBLLJKJ-NSCUHMNNSA-N
Formula: C4H10N2
SMILES: CC=CCNN
Mol. weight [g/mol]: 86.14
CAS: 36566-68-4

Physical Properties

Property code	Value	Unit	Source
gf	218.86	kJ/mol	Joback Method
hf	78.59	kJ/mol	Joback Method
hfus	16.61	kJ/mol	Joback Method
hvap	41.53	kJ/mol	Joback Method
log10ws	-0.96		Crippen Method
logp	0.026		Crippen Method
mcvol	82.880	ml/mol	McGowan Method
pc	4565.38	kPa	Joback Method
rinpol	830.00		NIST Webbook
tb	417.78	K	Joback Method
tc	614.40	K	Joback Method
tf	265.68	K	Joback Method
vc	0.303	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	159.92	J/mol×K	417.78	Joback Method
cpg	169.12	J/mol×K	450.55	Joback Method
cpg	177.82	J/mol×K	483.32	Joback Method
cpg	186.06	J/mol×K	516.09	Joback Method
cpg	193.86	J/mol×K	548.86	Joback Method
cpg	201.23	J/mol×K	581.63	Joback Method
cpg	208.21	J/mol×K	614.40	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C36566684&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
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