Hydrazine, 1-ethyl-1-(2-methylpropyl)-

Other names: Hydrazine, 1-ethyl-1-isobutyl
Inchi: InChI=1S/C6H16N2/c1-4-8(7)5-6(2)3/h6H,4-5,7H2,1-3H3
InchiKey: SRPRMXWUMUHGED-UHFFFAOYSA-N
Formula: C6H16N2
SMILES: CCN(N)CC(C)C
Mol. weight [g/mol]: 116.20
CAS: 67398-35-0

Physical Properties

Property code	Value	Unit	Source
gf	174.43	kJ/mol	Joback Method
hf	-71.13	kJ/mol	Joback Method
hfus	15.99	kJ/mol	Joback Method
hvap	41.25	kJ/mol	Joback Method
log10ws	-1.09		Crippen Method
logp	0.838		Crippen Method
mcvol	115.360	ml/mol	McGowan Method
pc	3337.38	kPa	Joback Method
rinpol	829.00		NIST Webbook
rinpol	829.00		NIST Webbook
tb	421.21	K	Joback Method
tc	603.52	K	Joback Method
tf	258.11	K	Joback Method
vc	0.412	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	240.16	J/mol×K	421.21	Joback Method
cpg	253.05	J/mol×K	451.60	Joback Method
cpg	265.36	J/mol×K	481.98	Joback Method
cpg	277.11	J/mol×K	512.37	Joback Method
cpg	288.31	J/mol×K	542.75	Joback Method
cpg	298.98	J/mol×K	573.14	Joback Method

cpg	309.14	J/mol×K	603.52	Joback Method

Sources

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=C67398350&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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