Alpha-mercaptopropionhydrazide

Inchi: InChI=1S/C3H8N2OS/c1-2(7)3(6)5-4/h2,7H,4H2,1H3,(H,5,6)
InchiKey: QFRGFCPPDRVHER-UHFFFAOYSA-N
Formula: C3H8N2OS
SMILES: CC(S)C(=O)NN
Mol. weight [g/mol]: 120.17
CAS: 758-95-2

Physical Properties

Property code	Value	Unit	Source
gf	28.25	kJ/mol	Joback Method
hf	-97.37	kJ/mol	Joback Method
hfus	15.94	kJ/mol	Joback Method
hvap	52.44	kJ/mol	Joback Method
log10ws	-0.65		Crippen Method
logp	-0.705		Crippen Method
mcvol	91.010	ml/mol	McGowan Method
pc	5908.07	kPa	Joback Method
tb	507.03	K	Joback Method
tc	735.59	K	Joback Method
tf	330.88	K	Joback Method
vc	0.322	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	189.33	J/mol×K	507.03	Joback Method
cpg	197.57	J/mol×K	545.12	Joback Method
cpg	205.32	J/mol×K	583.22	Joback Method
cpg	212.59	J/mol×K	621.31	Joback Method
cpg	219.39	J/mol×K	659.40	Joback Method
cpg	225.75	J/mol×K	697.49	Joback Method
cpg	231.67	J/mol×K	735.59	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C758952&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
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