

1-(2-Hydroxyethylthio)-2-(vinylthio)ethane

Other names:	(2-Hydroxyethylthio)ethyl vinyl sulfide
Inchi:	InChI=1S/C6H12OS2/c1-2-8-5-6-9-4-3-7/h2,7H,1,3-6H2
InchiKey:	AOIHPKYLXCJSNB-UHFFFAOYSA-N
Formula:	C6H12OS2
SMILES:	C=CSCCSCCO
Mol. weight [g/mol]:	164.29
CAS:	114811-37-9

Physical Properties

Property code	Value	Unit	Source
gf	16.90	kJ/mol	Joback Method
hf	-110.23	kJ/mol	Joback Method
hfus	22.36	kJ/mol	Joback Method
hvap	58.59	kJ/mol	Joback Method
log10ws	-1.71		Crippen Method
logp	1.589		Crippen Method
mcvol	129.670	ml/mol	McGowan Method
pc	3782.33	kPa	Joback Method
rinpol	1371.00		NIST Webbook
rinpol	1418.80		NIST Webbook
rinpol	1371.00		NIST Webbook
rinpol	1418.80		NIST Webbook
rinpol	1371.00		NIST Webbook
tb	563.10	K	Joback Method
tc	765.40	K	Joback Method
tf	285.24	K	Joback Method
vc	0.479	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	282.00	J/molxK	563.10	Joback Method
cpg	291.76	J/molxK	596.82	Joback Method
cpg	301.03	J/molxK	630.53	Joback Method

cpg	309.81	J/mol×K	664.25	Joback Method
cpg	318.10	J/mol×K	697.97	Joback Method
cpg	325.93	J/mol×K	731.68	Joback Method
cpg	333.29	J/mol×K	765.40	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C114811379&Units=SI
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

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

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