Ethanol, 2,2'-dithiobis-

Other names:	Ethanol, 2,2'-dithiodi-
	Bis(2-hydroxyethyl) disulfide
	Diethanol disulfide
	Dithiodiglycol
	Hydroxyethyl disulfide
	2-Hydroxyethanedisulfide
	2-Hydroxyethyl disulfide
	2,2'-Dithiodiethanol
	3,4-Dithia-1,6-hexanediol
	USAF TH-9
	2,2'-Dithiobisethanol
	2-Mercaptoethanol disulfide
	NSC 33920
	«beta»-Hydroxyethyl disulfide
Inchi:	InChI=1S/C4H10O2S2/c5-1-3-7-8-4-2-6/h5-6H,1-4H2
InchiKey:	KYNFOMQIXZUKRK-UHFFFAOYSA-N
Formula:	C4H10O2S2
SMILES:	OCCSSCCO
Mol. weight [g/mol]:	154.25
CAS:	1892-29-1

Physical Properties

Property code	Value	Unit	Source
gf	-224.60	kJ/mol	Joback Method
hf	-346.61	kJ/mol	Joback Method
hfus	22.55	kJ/mol	Joback Method
hvap	71.49	kJ/mol	Joback Method
log10ws	-0.78		Crippen Method
logp	0.352		Crippen Method
mcvol	111.660	ml/mol	McGowan Method
pc	5220.69	kPa	Joback Method
rinpol	1425.00		NIST Webbook
tb	612.84	K	Joback Method
tc	804.64	K	Joback Method
tf	325.28	K	Joback Method
vc	0.406	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	253.80	J/mol×K	612.84	Joback Method
cpg	260.91	J/mol×K	644.81	Joback Method
cpg	267.67	J/mol×K	676.77	Joback Method
cpg	274.07	J/mol×K	708.74	Joback Method
cpg	280.13	J/mol×K	740.71	Joback Method
cpg	285.83	J/mol×K	772.68	Joback Method
cpg	291.17	J/mol×K	804.64	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	433.70	K	0.50	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C1892291&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume