

2-Mercaptoethyl ether

Other names:	«beta», «beta»'-Dimercaptodiethyl ether 2,2'-Oxydiethanethiol Bis(2-mercaptoethyl)ether di(2-Mercaptoethyl) ether Ethanethiol, 2,2'-oxybis- «beta»-Mercaptoethyl ether Dimercaptodiethyl ether Dithiodiglycol Ethanethiol, 2,2'-oxydi- Ethyl ether dimercaptan 2,2'-Dimercaptodiethyl ether 2,2'-Oxydi-1-ethanethiol 3-Oxapentane-1,5-dithiol 1,5-Dimercapto-3-oxapentane NSC 51020 NSC 6751
Inchi:	InChI=1S/C4H10OS2/c6-3-1-5-2-4-7/h6-7H,1-4H2
InchiKey:	CNDCQWGRLNGNNO-UHFFFAOYSA-N
Formula:	C4H10OS2
SMILES:	SCCOCCS
Mol. weight [g/mol]:	138.25
CAS:	2150-02-9

Physical Properties

Property code	Value	Unit	Source
gf	-63.42	kJ/mol	Joback Method
hf	-181.15	kJ/mol	Joback Method
hfus	15.39	kJ/mol	Joback Method
hvap	40.38	kJ/mol	Joback Method
log10ws	-0.73		Crippen Method
logp	0.863		Crippen Method
mcvol	105.790	ml/mol	McGowan Method
pc	4498.26	kPa	Joback Method
tb	439.06	K	Joback Method
tc	655.87	K	Joback Method
tf	229.99	K	Joback Method
vc	0.386	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	194.06	J/mol×K	439.06	Joback Method
cpg	203.24	J/mol×K	475.20	Joback Method
cpg	212.06	J/mol×K	511.33	Joback Method
cpg	220.52	J/mol×K	547.47	Joback Method
cpg	228.61	J/mol×K	583.60	Joback Method
cpg	236.34	J/mol×K	619.74	Joback Method
cpg	243.70	J/mol×K	655.87	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=C2150029&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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