Methylenebis(ethyl thioglycolate)

Inchi: InChI=1S/C9H16O4S2/c1-3-12-8(10)5-14-7-15-6-9(11)13-4-2/h3-7H2,1-2H3
InchiKey: NBNGVIRHOBZBHM-UHFFFAOYSA-N
Formula: C9H16O4S2
SMILES: CCOC(=O)CSCSCC(=O)OCC
Mol. weight [g/mol]: 252.35
CAS: 61713-23-3

Physical Properties

Property code	Value	Unit	Source
gf	-376.70	kJ/mol	Joback Method
hf	-634.95	kJ/mol	Joback Method
hfus	32.90	kJ/mol	Joback Method
hvap	67.57	kJ/mol	Joback Method
log10ws	-1.58		Crippen Method
logp	1.537		Crippen Method
mcvol	185.250	ml/mol	McGowan Method
pc	2613.74	kPa	Joback Method
tb	695.46	K	Joback Method
tc	908.45	K	Joback Method
tf	404.31	K	Joback Method
vc	0.696	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	472.06	J/mol×K	695.46	Joback Method
cpg	484.58	J/mol×K	730.96	Joback Method
cpg	496.30	J/mol×K	766.46	Joback Method
cpg	507.21	J/mol×K	801.95	Joback Method
cpg	517.26	J/mol×K	837.45	Joback Method
cpg	526.45	J/mol×K	872.95	Joback Method
cpg	534.75	J/mol×K	908.45	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=C61713233&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