CH2F2O4S2

Inchi: InChI=1S/CH2F2O4S2/c2-8(4,5)1-9(3,6)7/h1H2
InchiKey: DKWGSLVGHONKMY-UHFFFAOYSA-N
Formula: CH2F2O4S2
SMILES: O=S(=O)(F)CS(=O)(=O)F
Mol. weight [g/mol]: 180.15
CAS: 42148-23-2

Physical Properties

Property code	Value	Unit	Source
gf	-1369.16	kJ/mol	Joback Method
hf	-1362.89	kJ/mol	Joback Method
hfus	27.26	kJ/mol	Joback Method
hvap	53.46	kJ/mol	Joback Method
log10ws	-0.09		Crippen Method
logp	-0.457		Crippen Method
mcvol	84.670	ml/mol	McGowan Method
pc	8355.36	kPa	Joback Method
tb	316.38	K	Joback Method
tc	460.58	K	Joback Method
tf	179.33	K	Joback Method
vc	0.380	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	143.78	J/mol×K	316.38	Joback Method
cpg	148.52	J/mol×K	340.41	Joback Method
cpg	153.20	J/mol×K	364.45	Joback Method
cpg	157.81	J/mol×K	388.48	Joback Method
cpg	162.35	J/mol×K	412.51	Joback Method
cpg	166.80	J/mol×K	436.55	Joback Method
cpg	171.15	J/mol×K	460.58	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C42148232&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