Chloromethylmethyl sulfide

Other names:	CH3SCH2Cl
	Methane, chloro(methylthio)-
	«alpha»-Chlorodimethyl sulfide
	Chlorodimethyl thioether
	Chloromethyl methyl thioether
	Methylthiomethyl chloride
	Monochlorodimethyl sulfide
	Sulfide, chloromethyl methyl
	Chlorodimethyl sulfide
	Clorodimetilsolfuro
	Chloro(methylthio)methane
	NSC 63205
	chloromethyl methyl sulphide
Inchi:	InChI=1S/C2H5ClS/c1-4-2-3/h2H2,1H3
InchiKey:	JWMLCCRPDOIBAV-UHFFFAOYSA-N
Formula:	C2H5ClS
SMILES:	CSCCl
Mol. weight [g/mol]:	96.58
CAS:	2373-51-5

Physical Properties

Property code	Value	Unit	Source
gf	-12.85	kJ/mol	Joback Method
hf	-58.48	kJ/mol	Joback Method
hfus	9.26	kJ/mol	Joback Method
hvap	31.25	kJ/mol	Joback Method
ie	9.17	eV	NIST Webbook
log10ws	-1.19		Crippen Method
logp	1.546		Crippen Method
mcvol	67.630	ml/mol	McGowan Method
pc	4890.21	kPa	Joback Method
rinpol	713.00		NIST Webbook
rinpol	713.00		NIST Webbook
tb	378.20	K	NIST Webbook
tc	553.87	K	Joback Method
tf	176.62	K	Joback Method
vc	0.251	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	93.77	J/mol×K	351.37	Joback Method
cpg	98.65	J/mol×K	385.12	Joback Method
cpg	103.36	J/mol×K	418.87	Joback Method
cpg	107.91	J/mol×K	452.62	Joback Method
cpg	112.29	J/mol×K	486.37	Joback Method
cpg	116.51	J/mol×K	520.12	Joback Method
cpg	120.55	J/mol×K	553.87	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=C2373515&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
ie:	Ionization energy
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
tc:	Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume