bis-(2-Chloroethyl) tetrasulfide

Inchi: InChI=1S/C4H8Cl2S4/c5-1-3-7-9-10-8-4-2-6/h1-4H2
InchiKey: ILBRSMOJIAIFDD-UHFFFAOYSA-N
Formula: C4H8Cl2S4
SMILES: ClCCSSSSCCCl
Mol. weight [g/mol]: 255.27

Physical Properties

Property code	Value	Unit	Source
gf	91.42	kJ/mol	Joback Method
hf	10.11	kJ/mol	Joback Method
hfus	31.03	kJ/mol	Joback Method
hvap	60.54	kJ/mol	Joback Method
log10ws	-4.31		Crippen Method
logp	4.142		Crippen Method
mcvol	157.100	ml/mol	McGowan Method
pc	3867.48	kPa	Joback Method
rinpol	1800.00		NIST Webbook
rinpol	1878.00		NIST Webbook
rinpol	1800.00		NIST Webbook
tb	640.90	K	Joback Method
tc	912.50	K	Joback Method
tf	332.28	K	Joback Method
vc	0.574	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	298.69	J/mol×K	640.90	Joback Method
cpg	307.88	J/mol×K	686.17	Joback Method
cpg	316.30	J/mol×K	731.43	Joback Method
cpg	323.91	J/mol×K	776.70	Joback Method
cpg	330.68	J/mol×K	821.96	Joback Method
cpg	336.58	J/mol×K	867.23	Joback Method
cpg	341.59	J/mol×K	912.50	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R41548&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
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume