Methyl 1-propenyl tetrasulfide, (E)-

Other names: methyl trans-1-propenyl tetrasulfide
Inchi: InChI=1S/C4H8S4/c1-3-4-6-8-7-5-2/h3-4H,1-2H3/b4-3+
InchiKey: JVAMVFJAZPOUHO-ONEGZZNKSA-N
Formula: C4H8S4
SMILES: CC=CSSSSC
Mol. weight [g/mol]: 184.37

Physical Properties

Property code	Value	Unit	Source
gf	195.50	kJ/mol	Joback Method
hf	158.81	kJ/mol	Joback Method
hfus	22.84	kJ/mol	Joback Method
hvap	51.72	kJ/mol	Joback Method
log10ws	-4.35		Crippen Method
logp	3.828		Crippen Method
mcvol	128.320	ml/mol	McGowan Method
pc	4553.06	kPa	Joback Method
rinpol	1384.00		NIST Webbook
rinpol	1385.00		NIST Webbook
rinpol	1369.00		NIST Webbook
rinpol	1382.00		NIST Webbook
tb	570.20	K	Joback Method
tc	848.86	K	Joback Method
tf	267.36	K	Joback Method
vc	0.456	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	238.04	J/mol×K	570.20	Joback Method
cpg	248.01	J/mol×K	616.64	Joback Method
cpg	257.26	J/mol×K	663.09	Joback Method
cpg	265.78	J/mol×K	709.53	Joback Method
cpg	273.56	J/mol×K	755.98	Joback Method

cpg	280.56	J/mol×K	802.42	Joback Method
cpg	286.79	J/mol×K	848.86	Joback Method

Sources

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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R53379&Units=SI

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