Methyl propyl tetrasulfide

Inchi: InChI=1S/C4H10S4/c1-3-4-6-8-7-5-2/h3-4H2,1-2H3
InchiKey: QQHQQGRHGUQYLO-UHFFFAOYSA-N
Formula: C4H10S4
SMILES: CCCSSSSC
Mol. weight [g/mol]: 186.38

Physical Properties

Property code	Value	Unit	Source
gf	115.28	kJ/mol	Joback Method
hf	41.59	kJ/mol	Joback Method
hfus	22.64	kJ/mol	Joback Method
hvap	51.77	kJ/mol	Joback Method
log10ws	-4.00		Crippen Method
logp	3.704		Crippen Method
mcvol	132.620	ml/mol	McGowan Method
pc	4249.61	kPa	Joback Method
rinpol	1369.00		NIST Webbook
rinpol	1362.00		NIST Webbook
rinpol	1368.00		NIST Webbook
rinpol	1362.00		NIST Webbook
rinpol	1375.00		NIST Webbook
rinpol	1369.00		NIST Webbook
rinpol	1368.00		NIST Webbook
rinpol	1369.00		NIST Webbook
rinpol	1369.00		NIST Webbook
tb	566.04	K	Joback Method
tc	831.53	K	Joback Method
tf	272.44	K	Joback Method
vc	0.475	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	258.22	J/mol×K	566.04	Joback Method

cpg	269.10	J/mol×K	610.29	Joback Method
cpg	279.31	J/mol×K	654.54	Joback Method
cpg	288.83	J/mol×K	698.79	Joback Method
cpg	297.61	J/mol×K	743.03	Joback Method
cpg	305.61	J/mol×K	787.28	Joback Method
cpg	312.80	J/mol×K	831.53	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=R53351&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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume