1-Propene, 2-methyl-1-(methylthio)-

Inchi: InChI=1S/C5H10S/c1-5(2)4-6-3/h4H,1-3H3
InchiKey: COQOFJMYYXLQHT-UHFFFAOYSA-N
Formula: C5H10S
SMILES: CSC=C(C)C
Mol. weight [g/mol]: 102.20
CAS: 52101-04-9

Physical Properties

Property code	Value	Unit	Source
gf	96.01	kJ/mol	Joback Method
hf	2.77	kJ/mol	Joback Method
hfus	11.73	kJ/mol	Joback Method
hvap	33.58	kJ/mol	Joback Method
log10ws	-2.15		Crippen Method
logp	2.273		Crippen Method
mcvol	93.360	ml/mol	McGowan Method
pc	3791.65	kPa	Joback Method
tb	386.62	K	Joback Method
tc	591.31	K	Joback Method
tf	161.47	K	Joback Method
vc	0.350	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	154.81	J/mol×K	386.62	Joback Method
cpg	164.70	J/mol×K	420.74	Joback Method
cpg	174.11	J/mol×K	454.85	Joback Method
cpg	183.06	J/mol×K	488.97	Joback Method
cpg	191.56	J/mol×K	523.08	Joback Method
cpg	199.64	J/mol×K	557.20	Joback Method
cpg	207.30	J/mol×K	591.31	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=C52101049&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume