Dimethane sulfonamide

Inchi: InChI=1S/C2H7NO4S2/c1-8(4,5)3-9(2,6)7/h3H,1-2H3
InchiKey: ICTGBOFCIDHVPA-UHFFFAOYSA-N
Formula: C2H7NO4S2
SMILES: CS(=O)(=O)NS(C)(=O)=O
Mol. weight [g/mol]: 173.21
CAS: 5347-82-0

Physical Properties

Property code	Value	Unit	Source
gf	-881.73	kJ/mol	Joback Method
hf	-937.84	kJ/mol	Joback Method
hfus	28.79	kJ/mol	Joback Method
hvap	63.75	kJ/mol	Joback Method
log10ws	0.50		Crippen Method
logp	-1.505		Crippen Method
mcvol	105.200	ml/mol	McGowan Method
pc	8463.32	kPa	Joback Method
tb	390.89	K	Joback Method
tc	559.53	K	Joback Method
tf	242.08	K	Joback Method
vc	0.434	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	191.62	J/mol×K	390.89	Joback Method
cpg	199.61	J/mol×K	419.00	Joback Method
cpg	207.40	J/mol×K	447.10	Joback Method
cpg	214.96	J/mol×K	475.21	Joback Method
cpg	222.29	J/mol×K	503.31	Joback Method
cpg	229.36	J/mol×K	531.42	Joback Method
cpg	236.18	J/mol×K	559.53	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5347820&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume