Vinylsulfonamide

Inchi: InChI=1S/C2H5NO2S/c1-2-6(3,4)5/h2H,1H2,(H2,3,4,5)
InchiKey: JOXWSDNHLSQKCC-UHFFFAOYSA-N
Formula: C2H5NO2S
SMILES: C=CS(N)(=O)=O
Mol. weight [g/mol]: 107.13
CAS: 2386-58-5

Physical Properties

Property code	Value	Unit	Source
gf	-348.29	kJ/mol	Joback Method
hf	-378.74	kJ/mol	Joback Method
hfus	16.23	kJ/mol	Joback Method
hvap	48.65	kJ/mol	Joback Method
log10ws	-0.27		Crippen Method
logp	-0.582		Crippen Method
mcvol	72.810	ml/mol	McGowan Method
pc	7483.15	kPa	Joback Method
tb	362.15	K	Joback Method
tc	547.08	K	Joback Method
tf	232.36	K	Joback Method
vc	0.283	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	123.04	J/mol×K	362.15	Joback Method
cpg	129.05	J/mol×K	392.97	Joback Method
cpg	134.85	J/mol×K	423.79	Joback Method
cpg	140.44	J/mol×K	454.62	Joback Method
cpg	145.80	J/mol×K	485.44	Joback Method
cpg	150.94	J/mol×K	516.26	Joback Method
cpg	155.85	J/mol×K	547.08	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=C2386585&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

https://www.chemeo.com/cid/96-979-0/Vinylsulfonamide.pdf

Generated by Cheméo on 2024-10-12 03:00:35.560902407 +0000 UTC m=+3282898.197871655.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.