2,2-Dimethylthiazolidine

Other names: Thiazolidine, 2,2-dimethyl-
2,2-Dimethyl-1,3-thiazolidine
Inchi: InChI=1S/C5H11NS/c1-5(2)6-3-4-7-5/h6H,3-4H2,1-2H3
InchiKey: SNPQRYOQWLOTFA-UHFFFAOYSA-N
Formula: C5H11NS
SMILES: CC1(C)NCCS1
Mol. weight [g/mol]: 117.21
CAS: 19351-18-9

Physical Properties

Property code	Value	Unit	Source
gf	149.85	kJ/mol	Joback Method
hf	12.26	kJ/mol	Joback Method
hfus	9.59	kJ/mol	Joback Method
hvap	38.40	kJ/mol	Joback Method
log10ws	-1.49		Crippen Method
logp	1.059		Crippen Method
mcvol	96.780	ml/mol	McGowan Method
pc	4730.11	kPa	Joback Method
rinpol	952.00		NIST Webbook
ripol	1395.00		NIST Webbook
tb	418.00	K	NIST Webbook
tc	660.60	K	Joback Method
tf	369.39	K	Joback Method
vc	0.338	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	182.12	J/mol×K	425.70	Joback Method
cpg	195.72	J/mol×K	464.85	Joback Method
cpg	208.20	J/mol×K	504.00	Joback Method
cpg	219.71	J/mol×K	543.15	Joback Method
cpg	230.36	J/mol×K	582.30	Joback Method

cpg	240.30	J/mol×K	621.45	Joback Method
cpg	249.65	J/mol×K	660.60	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C19351189&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

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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