Ammonium thiosulfate

Inchi: InChI=1S/H8N2O3S2/c1-4-7(3,6)5-2/h1-2H4
InchiKey: WBLLZVMUBRIBIN-UHFFFAOYSA-N
Formula: H8N2O3S2
SMILES: NOS(=O)(=S)ON
Mol. weight [g/mol]: 148.21

Physical Properties

Property code	Value	Unit	Source
gf	-312.57	kJ/mol	Joback Method
hf	-404.06	kJ/mol	Joback Method
hfus	20.41	kJ/mol	Joback Method
hvap	61.24	kJ/mol	Joback Method
log10ws	1.11		Crippen Method
logp	-1.657		Crippen Method
mcvol	81.130	ml/mol	McGowan Method
pc	9335.11	kPa	Joback Method
tb	516.36	K	Joback Method
tc	753.13	K	Joback Method
tf	371.62	K	Joback Method
vc	0.274	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	161.40	J/mol×K	516.36	Joback Method
cpg	166.60	J/mol×K	555.82	Joback Method
cpg	171.69	J/mol×K	595.28	Joback Method
cpg	176.61	J/mol×K	634.75	Joback Method
cpg	181.29	J/mol×K	674.21	Joback Method
cpg	185.68	J/mol×K	713.67	Joback Method
cpg	189.71	J/mol×K	753.13	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=B6000553&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