Ammonium sulfamate

Other names:	Ammonium amidosulfonate
	Sulfamic acid ammonium salt
	Sulfamic acid, monoammonium salt
	Amcide
	Amicide
	Ammat
	Ammate
	Ammate X
	Ammonium amidosulphate
	Ammonium sulphamate
	Ammonium sulphamidate
	Ammoniumsalz der amidosulfonsaure
	AMS
	Ikurin
	Monoammonium sulfamate
	Sulfamate
	Sulfamate dammonium
	Sulfaminsaure
	Ammate X-NI
	Ammonia sulfamate
	Ammonium amidosulfate
	Atlacide
	Necco fire retardant 2750, 2578, 2762
	Root-out
	Sepimate
	Silvacide
Inchi:	InChI=1S/H6N2O3S/c1-5-6(2,3)4/h1H4,(H2,2,3,4)
InchiKey:	GWNMSRRWAFPARP-UHFFFAOYSA-N
Formula:	H6N2O3S
SMILES:	NOS(N)(=O)=O
Mol. weight [g/mol]:	114.12
CAS:	7773-06-0

Physical Properties

Property code	Value	Unit	Source
gf	-491.52	kJ/mol	Joback Method

hf	-561.32	kJ/mol	Joback Method
hfus	18.72	kJ/mol	Joback Method
hvap	57.92	kJ/mol	Joback Method
log10ws	0.42		Crippen Method
logp	-1.920		Crippen Method
mcvol	64.780	ml/mol	McGowan Method
pc	10716.32	kPa	Joback Method
tb	414.66	K	Joback Method
tc	614.33	K	Joback Method
tf	317.07	K	Joback Method
vc	0.237	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	127.13	J/mol×K	414.66	Joback Method
cpg	131.66	J/mol×K	447.94	Joback Method
cpg	136.12	J/mol×K	481.22	Joback Method
cpg	140.50	J/mol×K	514.50	Joback Method
cpg	144.75	J/mol×K	547.77	Joback Method
cpg	148.87	J/mol×K	581.05	Joback Method
cpg	152.83	J/mol×K	614.33	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C7773060&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume