Phosphoramidothioic acid, O,S-dimethyl ester

Other names:	Methamidophos
	Bayer 5546
	Chevron 9006
	Metamidophos
	Monitor
	O,S-Dimethyl phosphoramidothioate
	O,S-Dimethyl phosphoramidothiolate
	Ortho 9006
	RE 9006
	Tamaron
	Acephate-met
	BAY 71628
	BAYER 71628
	Chevron ortho 9006
	O,S-Dimethyl ester of amidothiophosphoric acid
	ENT 27,396
	Hamidop
	Metamidofos estrella
	MTD
	NSC 190987
	Pillaron
	SRA 5172
	Tahmabon
	Thiophosphorsaeure-O,S-dimethylesteramid
	Filitox
	Nitofol
	Patrole
	Tam
	Tamanox
	Methyl phosphoramidothioate ((MeO)(MeS)P(O)(NH2))
	Amidor
	CKB 1220
	Monitor (insecticide)
	Ortho Monitor
	Sniper
	O,S-dimethyl phosphoroamidothioate
Inchi:	InChI=1S/C2H8NO2PS/c1-5-6(3,4)7-2/h1-2H3,(H2,3,4)
InchiKey:	NNKVPIKMPCQWCG-UHFFFAOYSA-N
Formula:	C2H8NOPS2
SMILES:	COP(N)(=O)SC

Mol. weight [g/mol]: 157.19
CAS: 10265-92-6

Physical Properties

Property code	Value	Unit	Source
log10ws	-2.33		Crippen Method
logp	1.063		Crippen Method
mcvol	97.570	ml/mol	McGowan Method
rinpol	1230.00		NIST Webbook
rinpol	1228.00		NIST Webbook
rinpol	1241.00		NIST Webbook
rinpol	1245.00		NIST Webbook
rinpol	1228.00		NIST Webbook
rinpol	1204.00		NIST Webbook
rinpol	1204.00		NIST Webbook
rinpol	1228.00		NIST Webbook
rinpol	1211.00		NIST Webbook
tf	319.85 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	13.34	kJ/mol	316.80	NIST Webbook

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C10265926&Units=SI

Legend

hfust:	Enthalpy of fusion at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
rinpol:	Non-polar retention indices
tf:	Normal melting (fusion) point