Famphur

Other names:
Famophos
Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
Phosphorothioic acid, O,O-dimethyl ester, O-ester with p-hydroxy-N,N-dimethylbenzenesulfonamide
American Cyanamid 38023
CL 38023
ENT 25,644
Famfur
Famphos
O,O-Dimethyl O-[p-(Dimethylsulfamoyl)phenyl] phosphorothioate
Warbex
AC 38023
American cyanamid CL-38,023
Bo-ana
O-(4-((Dimethylamino)sulfonyl)phenyl) O,O-dimethyl phosphorothioate
O,O-Dimethyl O-(p-(N,N-dimethylsulfamoyl)phenyl) phosphorothioate
O-4-Dimethylsulfamoylphenyl O,O-dimethyl phosphorothioate
Dovip
Famofos
Famophos warbex
Fanfos
Rcra waste number P097
Warbexol
O,O-Dimethyl phosphorothioate O-ester with p-hydroxy-N,N-dimethylbenzenesulfonamide
O-[4-[(dimethylamino)sulphonyl]phenyl] O,O-dimethyl thiophosphate
O-[4-(dimethylamino)sulfonyl]phenyl] O,O-dimethylphosphorothionate

Inchi: InChI=1S/C10H16NO5PS2/c1-11(2)19(12,13)10-7-5-9(6-8-10)16-17(18,14-3)15-4/h5-8H
InchiKey: JISACBWYRJHSMG-UHFFFAOYSA-N
Formula: C10H16NO4PS
SMILES: COP(=S)(OC)Oc1ccc(S(=O)(=O)N(C)C)cc1
Mol. weight [g/mol]: 277.28
CAS: 52-85-7

Physical Properties

Property code	Value	Unit	Source
log10ws	1.89		Crippen Method
logp	1.833		Crippen Method

mcvol	220.490	ml/mol	McGowan Method
rinpol	2334.00		NIST Webbook
rinpol	2334.00		NIST Webbook
tf	328.72 ± 0.20	K	NIST Webbook
tf	330.00 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	26.50	kJ/mol	326.80	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=C52857&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