Azinphos-methyl

Other names:

Phosphorodithioic acid, O,O-dimethyl S-[(4-oxo-1,2,3-benzotriazin-3(4H)-yl)methyl] ester

Phosphorodithioic acid, O,O-dimethyl ester, S-ester with 3-(mercaptomethyl)-1,2,3-benzotriazin-4(3H)-one

Azinfos-Methyl

Azinphos

Bayer 17147

Cotneon

Cotnion

ENT 23,233

Gusathion

Gusathion Methyl

Gusathion K

Gusathion M

Gusathion 25

Gusathion-20

Guthion

Methyl gusathion

Methyl guthion

S-(3,4-Dihydro-4-oxobenzo[d]-[1,2,3]-triazin-3-ylmethyl)OO-dimethyl-phosphorodithioate

Azinophos-methyl

Azinphos-metile

BAY 9027

BAY 17147

Bayer 9027

Benzotriazinedithiophosphoric acid dimethoxy ester

1,2,3-Benzotriazin-4(3H)-one, 3-(mercaptomethyl)-, O,O-dimethyl phosphorodithioate

Carfene

Cotnion methyl

Crysthion 2L

Crysthyon

S-(3,4-Dihydro-4-oxo-1,2,3-benzotriazin-3-ylmethyl) O,O-dimethyl phosphorodithioate

O,O-Dimethyl-S-(benzaziminomethyl) dithiophosphate

O,O-Dimethyl-S-(1,2,3-benzotriazinyl-4-keto)methyl phosphorodithioate

O,O-Dimethyl S-(3,4-dihydro-4-keto-1,2,3-benzotriazinyl-3-methyl) dithiophosphate

Dimethyldithiophosphoric acid N-methylbenzazimide ester

O,O-Dimethyl S-(4-oxo-3H-1,2,3-benzotriazine-3-methyl)phosphorodithioate

O,O-Dimethyl S-(4-oxobenzotriazino-3-methyl)phosphorodithioate

O,O-Dimethyl S-(4-oxo-1,2,3-benzotriazino(3)-methyl) thiothionophosphate

O,O-Dimethyl-S-(4-oxobenzotriazin-3-methyl)-dithiophosphat

O,O-Dimethyl-S-((4-oxo-3H-1,2,3-benzotriazin-3-yl)-methyl)-dithiofosfaat

O,O-Dimethyl-S-((4-oxo-3H-1,2,3-benzotriazin-3-yl)-methyl)-dithiophosphat

O,O-Dimethyl S-4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl phosphorodithioate

O,O-Dimetil-S-((4-oxo-3H-1,2,3-benzotriazin-3-il)-metil)-ditiofosfato

Gothnion

3-(Mercaptomethyl)-1,2,3-benzotriazin-4(3H)-one O,O-dimethyl phosphorodithioate S-ester

Methylazinphos

N-Methylbenzazimide, dimethyldithiophosphoric acid ester

Metiltriazotion

NA 2783

NCI-C00066

R 1582

Azinugec

O,O-Dimethyl S-(3,4-dihydro-4-oxo-1,2,3-benzotriazin-3-yl-methyl) dithiophosphate

S-(3,4-dihydro-4-oxobenzo[d] [1,2,3]-triazin-3-ylmethyl) O,O-dimethylphoshorodithioate

Inchi: InChI=1S/C10H12N3O3PS2/c1-15-17(18,16-2)19-7-13-10(14)8-5-3-4-6-9(8)11-12-13/h3-

InchiKey: CJJOSEISRRTUQB-UHFFFAOYSA-N

Formula: C10H12N3O3PS2

SMILES: COP(=S)(OC)SCn1nnc2ccccc2c1=O

Mol. weight [g/mol]: 317.32

CAS: 86-50-0

Physical Properties

Property code	Value	Unit	Source
log10ws	0.28		Crippen Method
logp	2.000		Crippen Method
mcvol	209.250	ml/mol	McGowan Method
rinpol	2464.00		NIST Webbook
tf	346.28 ± 0.20	K	NIST Webbook
tf	344.50 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	27.76	kJ/mol	345.30	NIST Webbook

Sources

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=C86500&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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