Azinphos-ethyl

Other names:

Phosphorodithioic acid, O,O-diethyl S-[(4-oxo-1,2,3-benzotriazin-3(4H)-yl)methyl] ester
Phosphorodithioic acid, O,O-diethyl ester, S-ester with 3-(mercaptomethyl)-1,2,3-benzotriazin-4(3H)-one
Bayer 16259
Ethyl azinphos
Ethyl Gusathion
Ethyl Guthion
Gusathion ethyl
Gusathion A
Gusathion H and K
Gusation A
Guthion ethyl
O,O-Diethyl S(4-oxobenzyltriazine-3-methyl) dithiophosphate
R 1513
S-(3,4-Dihydro-4-oxobenzo [d]-[1,2,3]-triazin-3-ylmethyl) OO-diethyl phosphorodithioate
Athyl-gusathion
Azinfos-ethyl
Azinophos-ethyl
Azinos
Azinphos-aethyl
Azinphos-etile
BAY 16255
Benzotriazine derivative of an ethyl dithiophosphate
Bionex
Cotnion-ethyl
Crysthion
O,O-Diaethyl-S-(4-oxobenzotriazin-3-methyl)-dithiophosphat
O,O-Diaethyl-S-((4-oxo-3H-1,2,3-benzotriazin-3-yl)-methyl)-dithiophosphat
O,O-Diethyl S-(4-oxobenzotriazino-3-methyl)phosphorodithioate
O,O-Diethyl-S-(4-oxo-3H-1,2,3-benzotriazine-3-yl)-methyl-dithiophosphate
O,O-Diethyl-S-((4-oxo-3H-1,2,3-benzotriazin-3-yl)-methyl)-dithiofosfaat
O,O-Diethyl phosphorodithioate S-ester with 3-(mercaptomethyl)-1,2,3-benzotriazin-4(3H)-one
O,O-Dietil-S-((4-oxo-3H-1,2,3-benzotriazin-3-il)-metil)-ditiofosfato
3,4-Dihydro-4-oxo-3-benzotriazinylmethyl O,O-diethyl phosphorodithioate
S-(3,4-Dihydro-4-oxo-1,2,3-benzotriazin-3-ylmethyl) O,O-diethyl phosphorodithioate
ENT 22,014
Gusathion H
Gusathion K
Guthion
Triazotion
Azinugec E

	Bay 16259
	Cotnion-ethyl-methyl
	Gusathion K forte
	Gutex
	O,O-Diethyl S-[(4-oxo-1,2,3-benzotriazin-3(4H)-yl) methyl] phosphorodithioate
	Sepizin L
Inchi:	InChI=1S/C12H16N3O3PS2/c1-3-17-19(20,18-4-2)21-9-15-12(16)10-7-5-6-8-11(10)13-1
InchiKey:	RQVGAIADHNPSME-UHFFFAOYSA-N
Formula:	C12H16N3O3PS2
SMILES:	CCOP(=S)(OCC)SCn1nnc2ccccc2c1=O
Mol. weight [g/mol]:	345.38
CAS:	2642-71-9

Physical Properties

Property code	Value	Unit	Source
log10ws	-0.55		Crippen Method
logp	2.780		Crippen Method
mcvol	237.430	ml/mol	McGowan Method
rinpol	2546.00		NIST Webbook
rinpol	2579.00		NIST Webbook
rinpol	2551.00		NIST Webbook
rinpol	2556.00		NIST Webbook
rinpol	2553.00		NIST Webbook
rinpol	2551.00		NIST Webbook
rinpol	2553.00		NIST Webbook
rinpol	2546.00		NIST Webbook
rinpol	2579.00		NIST Webbook
tf	324.44 ± 0.20	K	NIST Webbook
tf	326.00	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	25.22	kJ/mol	322.20	NIST Webbook
hsubt	86.80	kJ/mol	373.00	NIST Webbook

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	384.00	K	0.00	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=C2642719&Units=SI

Legend

hfust: Enthalpy of fusion at a given temperature
hsubt: Enthalpy of sublimation 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
tbrp: Boiling point at reduced pressure
tf: Normal melting (fusion) point