Oxamyl

Other names:	2-(Dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxoethanimidothioic acid methyl ester
	2-Dimethylamino-1-(methylthio)glyoxal O-methylcarbamoylmonoxime
	D 1410
	DPX 1410
	DPX 1410L
	Du Pont 1410
	Ethanimidothioic acid, 2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester
	Insecticide-nematicide 1410
	Methyl 1-(dimethylcarbamoyl)-N-(methylcarbamoyloxy)thioformimidate
	Methyl N',N'-dimethyl-N-((methylcarbamoyl)oxy)-1-thiooxamimidate
	N',N'-Dimethyl-N-((methylcarbamoyl)oxy)-1-thiooxamimidic acid methyl ester
	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate
	N,N-Dimethyl-«alpha»-methylcarbamoyloxyimino-«alpha»-(methylthio)acetamide
	N,N-Dimethyl-Â«alphaÂ»-methylcarbamoyloxyimino-Â«alphaÂ»-(methylthio)acetamide
	N,N-dimethyl-2-methylcarbamoyloxyimino-2-(methylthio)acetamide
	NSC 379588
	Nematicide 1410
	Oxamimidic acid, N',N'-dimethyl-N-((methylcarbamoyl)oxy)-1-methylthio-
	Oxamimidic acid, N',N'-dimethyl-N-[(methylcarbamoyl)oxy]-1-thio-, methyl ester
	Oxamyl (pesticide)
	S-Methyl 1-(dimethylcarbamoyl)-N-[(methylcarbamoyl)oxy]thioformimidate
	Thioxamyl
	Vydate
	Vydate L
	Vydate L insecticide/nematicide
	Vydate L oxamyl insecticide/nematocide
Inchi:	InChI=1S/C7H13N3O3S/c1-8-7(12)13-9-5(14-4)6(11)10(2)3/h1-4H3,(H,8,12)
InchiKey:	KZAUOCCYDRDERY-UHFFFAOYSA-N
Formula:	C7H13N3O3S
SMILES:	CNC(=O)ON=C(SC)C(=O)N(C)C
Mol. weight [g/mol]:	219.26
CAS:	23135-22-0

Physical Properties

Property code	Value	Unit	Source
hf	-309.89	kJ/mol	Joback Method

hvap	65.77	kJ/mol	Joback Method
log10ws	0.11		Aqueous Solubility Prediction Method
log10ws	0.11		Estimated Solubility Method
logp	0.107		Crippen Method
mcvol	160.490	ml/mol	McGowan Method
pc	2912.39	kPa	Joback Method
tb	697.67	K	Joback Method
tc	917.68	K	Joback Method
tf	373.01 ± 0.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	30.17	kJ/mol	372.20	NIST Webbook

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method: http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
Estimated Solubility Method: http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C23135220&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hf: Enthalpy of formation at standard conditions
hfust: Enthalpy of fusion at a given temperature
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