

Deltamethrin

Other names:	Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, (1R-(1«alpha»(S*),3«alpha»))-Decamethrin Decamethrine Decis Dekametrin Deltamethrine Esbecythrín FMC 45498 K-Obiol K-Othrin NRDC 161 OMS 1988 RU 22974 (S)-Cyano(4-phenoxyphenyl)methyl 3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, (1R,3R)-Cislin Crackdown Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)-Decis 0.5ULV Decis 1.5ULV Decis 2.5ULV DeltaGard Deltagran Glossinex 200 IPO 8831 K-Othrine New Musigie Phagase 1 RUP 987 Suspend Butox Zorcis «alpha»-cyano-3-phenoxybenzyl [1R-[1«alpha»(S*),3«alpha»]]-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, InChI=1S/C22H19Br2NO3/c1-22(2)17(12-19(23)24)20(22)21(26)28-18(13-25)14-8-10-16
Inchi:	
InchiKey:	SVQHJDITYPKCJD-DXCJPMOASA-N
Formula:	C22H19Br2NO3
SMILES:	CC1(C)C(C=C(Br)Br)C1C(=O)OC(C#N)c1ccc(Oc2ccccc2)cc1
Mol. weight [g/mol]:	505.20
CAS:	62229-77-0

Physical Properties

Property code	Value	Unit	Source
gf	281.52	kJ/mol	Joback Method
hf	-45.79	kJ/mol	Joback Method
hfus	45.83	kJ/mol	Joback Method
hvap	102.49	kJ/mol	Joback Method
log10ws	-7.32		Crippen Method
logp	6.490		Crippen Method
mcvol	307.850	ml/mol	McGowan Method
pc	1784.86	kPa	Joback Method
rinpol	2959.00		NIST Webbook
tb	1095.45	K	Joback Method
tc	1365.29	K	Joback Method
tf	681.36	K	Joback Method
vc	1.171	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	947.63	J/mol×K	1095.45	Joback Method
cpg	969.02	J/mol×K	1140.42	Joback Method
cpg	991.68	J/mol×K	1185.40	Joback Method
cpg	1015.94	J/mol×K	1230.37	Joback Method
cpg	1042.14	J/mol×K	1275.34	Joback Method
cpg	1070.62	J/mol×K	1320.31	Joback Method
cpg	1101.69	J/mol×K	1365.29	Joback Method

Sources

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307I>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Joback Method:

https://en.wikipedia.org/wiki/Joback_method

McGowan Method:

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C62229770&Units=SI>

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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