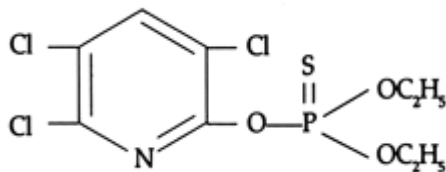


Technical Data Sheet

CHEMICAL IDENTIFICATION

Common Name:	CHLOPYRIPHOS ETHYL
Chemical Name:	0,0 Diethyl 0 (3,5,6 Trichloro-2Pyridyl) Phosphorothioate.
Chemical Family:	Organo phosphorus compound.
CAS Number:	2921-88-2
Empirical Formula:	C ₉ H ₁₁ Cl ₃ NO ₃ PS
Structural Formula:	



PHYSICAL AND TECHNICAL PROPERTIES

Molecular Weight:	350.6
Appearance:	Solid crystalline
Colour:	Off-white to pale yellow material
Odour:	Mild mercaptan
Melting Point:	41.5-43.5°C.
Density:	1.38 +- 0.03 @20°C
Vapour Pressure:	1.87 x 10 ⁻⁵ mmHg@25°C
Volatility:	Non volatile
Absorption Spectrum:	290 nm
Solubility in water:	2 mg/l@ 25°C
Solubility in organic solvents (mg/kg):	benzene 7900 acetone 6500 chloroform 6300 xylene 4000 isooctane 790 methanol 450 diethylether 5100 n-Octanol/water
Partition Coefficient:	4.70(P _{ow} log P)
Stability	
In water:	Stable in neutral and weak acid media. Hydrolyzed by strong alkali.
In temperature:	Sensitive to temperatures over 50°C
Flash Point:	Non-flammable
Explosiveness:	None explosive
Oxidising properties:	Shows NO oxidising properties
Corrosive properties:	Corrosive only to copper and brass
PH:	Aqueous solution of 5% is having pH value of 7
Viscosity:	0.83

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Chlorpyrifos Ethyl Technical grades available:

Chlorpyrifos:	94% Minimum
Moisture content by mass:	0.1 % Maximum
Acidity (as H ₂ SO ₄) by mass:	0.1 % Maximum
Material insoluble in acetone by mass:	0.5 % Maximum
Packing:	50 and 250 kg PE lined sheet steel drums.
Chlorpyrifos: (Low Odour)	99% Minimum
Moisture content by mass:	0.5 % Maximum
Acidity (as H ₂ SO ₄) by mass:	0.5 % Maximum
Material insoluble in acetone:	0.1 % Maximum
Packing:	50 kg PE lined sheet steel drums.

USES

Chlorpyrifos ethyl is a non- systemic insecticide with contact, stomach and respiratory action. It as a broad spectrum insecticide used in the control of Coleoptera, Diptera, Homoptera and Lepidoptera in soil or on foliage in a wide range of crops, including pome fruits, stone fruits, citrus fruits, nut crops, strawberries, figs, bananas, vegetables, beet, tobacco, soya beans, cotton, alfalfa, cotton, cereals, maize, mushrooms, turf and in forestry. Also used in the control of household pests including, cockroaches, fleas, flies, termites, ants, moths, bedbugs and insects in grain storage and animal houses. The product is non phytotoxic at recommended rates.

TOXICOLOGICAL INFORMATION

A number of toxicological studies considered by WHO and others in support of registration applications in many countries, shows Chlorpyrifos ethyl to be one of the safest insecticide available.

The main toxicity values of Chlorpyrifos ethyl are:

ACUTE TOXICITY

Acute toxicity

- LD₅₀ Oral (rat): > 161 mg/kg
- LD₅₀ dermal (rabbit): 2000 mg/kg
- LC₅₀ inhalation (rat): > 0.857 mg/l of air/4 hr

Irritancy

- Eye irritancy: Minimal irritant to rabbit eye
- Skin irritancy: Moderate skin sensitizer

ENVIRONMENTAL INFORMATION

- LC₅₀ fish (Rainbow trout): 0.003mg/l (96h)
- LC₅₀ Daphnia Magna: 0.017 - 0.025 ppm (48h)

TOXICITY TOWARDS BENEFICIAL INSECTS:

Toxic to the honeybees.(LD₅₀ -contact- 0.59 µg /bee), when exposed to direct treatment or residue on plants shortly after application. Do not apply to plants when bees are foraging.

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PACKAGING DETAILS

Chlorpyrifos ethyl is supplied in the packaging described below:
50kg and 250 kg PE Lined MS Drum (UN approved)

LABELLING DETAILS

In accordance with the EEC norms relevant to the classification and the labelling of dangerous goods, Chlorpyrifos ethyl is labelled with the following symbols and phrases:

Symbol:	T
Risk phrase:	R ~ 22,51,57
Safety advice:	S - 1,2,4,13,15,24,35,36,37,38,60.

The statements made in this Data Sheet are, to the best of our knowledge, as accurate as possible, are given only for information and are without guarantee or responsibility on our part regarding the various laws or patents in connection with the use of the product. Further information is available on request.