

MATERIAL SAFETY DATA SHEET TERMITICIDE: LENFOS 50EC

CAS No.: Chlorpyrifos Ethyl: 2921-88-2
UN No.: 3017

1. PRODUCT AND COMPANY IDENTIFICATION

Common name: Chlorpyrifos Ethyl

Trade name: LENFOS 50EC

Name & address of applicant/distributor:

HOP TRI AGROCHEMICALS CO., LTD

Lot B14, Hiep Phuoc IP, Nha Be District, HCMc, Vietnam

Tel: +84 8 38734115 Fax: +84 8 38734117

Name & address of manufacturer:

Hockley International Ltd

354 Park Lane, Poynton, Stockport, SK 12 1RL, Kingdom

Use: Insecticide

Emergency telephone number: +84 8 38734115

2. COMPOSITION/INFORMATION ON INGREDIENTS

Composition	CAS. No	Chemical name	Content (%)
Chlorpyrifos Ethyl	2921-88-2	O,O-diethyl O-(3,5,6- trichloro-2-pyridinyl) phosphorothioate	50.0
Other ingredients:			
Hydrocarbon, C9	-----		
Benzen sulphonic acid	90194-26-6	-----	50.0
Iso-Butanol	78-83-1		
2,6-Di-Tert-Butyl-P-Cresol	128-37-0		

3. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 3), H301

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section 15

Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R25

N Dangerous for the environment R50/53

For the full text of the R-phrases mentioned in this Section, see Section 15.

Label elements:

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word: Danger

Hazard statement(s)

H301 Toxic if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements: None

4. FIRST AID MEASURES

In case of poisoning by any exposure route contact a doctor. Have the product label or MSDS with you when calling or going for treatment.

Eye contact: Hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice immediately.

Skin: Remove contaminated clothing and launder before re-use. Any skin contaminated with the concentrate must be thoroughly washed with soap and water.

Ingestion: Seek medical advice immediately. Give a glass of water. If product has been swallowed and symptoms are evident and medical assistance is not immediately available, give one atropine tablet (0.6 mg) every five minutes until dryness of the mouth occurs. Preferably, carry out treatment under the direction of medical advice obtained by phone.

Inhalation: Remove victim from exposure - avoid becoming a casualty. If symptoms develop or persist, seek medical advice.

Medical Advice: Not available

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water fog, foam, carbon dioxide or dry chemical.

Specific Hazards: Overheated containers may rupture due to product decomposition under fire conditions.

Hazardous Combustion Products: If involved in a fire, it will emit oxides of nitrogen, carbon and sulfur and possibly methyl isocyanate.

Protective equipment: A self contained breathing apparatus and suitable protective clothing must be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

7. HANDLING AND STORAGE

Avoid contact with skin and eyes. Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight. Store in a locked enclosure. Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineer controls: Use with local exhaust ventilation or while wearing appropriate respirator.

Exposure controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal Protective Equipment: When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Color: Brown

Odor: Aromatic Hydrocarbons

Solubility: Emulsible in water.

Boiling point: Not available

Melting point (°C): Not available

Relative density: 1.05 – 1.15

pH: 5-7

Viscosity: Not available

Flash point: 47°C

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature conditions and recommended use.

Conditions to avoid: Avoid exposure to high temperature (>47°C) or direct sunlight. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

Materials to avoid: Strong oxidising substance. Strong acid. Strong alkalis.

Polymerization: Will not occur.

Hazardous decomposition products: None under normal conditions.

11. TOXICOLOGICAL INFORMATION

LD₅₀ (oral Rat): 66 mg/kg. Toxic if swallowed.

LD₅₀ (dermal Rat): 1250 – 2000 mg/kg. Harmonize classification.

LC₅₀ (inh-Rat): >1mg/l/4h. Irritating to respiratory system.

Non-genotoxic

No indication of human carcinogenicity.

No reproductive or development effects occurred at non-parentally toxic doses.

12. ECOLOGICAL INFORMATION

Toxicity:

Acute toxicity -Fish:

LC₅₀ 96h= 0.00054 mg/l (test data for active ingredient)

Acute toxicity –Aquatic Invertebrates:

EC₅₀ 48h=0.000014 mg/l (test data for active ingredient)

Acute toxicity – Aquatic Plants:

EC₅₀ 72h= 1.2 mg/l (test data for active ingredient)

NOEC 72h= 0.001 mg/l (test data for active ingredient)

Chronic toxicity –Fish early Life stage:

NOEC 35 days=0.00014 mg/l (test data for active ingredient)

Chronic toxicity –Aquatic Invertebrates:

NOEC 21 days=0.000056 mg/l Daphnia magna (test data for active ingredient)

NOEC 35 days= 0.0046 mg/l Mysidosis bahia (Mysid Shrimp) (test data for active ingredient)

Acute toxicity- terrestrial:

LD50= 0.25 µg/bee Apis Mellifera (Honey bee)

(Oral exposure) (test data for active ingredient)

LD50= 0.059 µg/bee Apis Mellifera (Honey bee)

(Topical exposure) (test data for active ingredient)

Persistence and degradability:

This product is not readily biodegradable. (test data for active ingredient).

Soil DT50 (lab)= 74 days (test data for active ingredient).

Water DT50= 4.5 days (test data for active ingredient).

Water and Sediment DT50=36.5 days (test data for active ingredient).

Bioaccumulative potential:

The product contains potentially bioaccumulating substances.

BCF= 1374 (bioaccumulation factor) (test data for active ingredient).

Partition coefficient:

Not relevant

Log Kow=4.7 (test data for active ingredient).

Mobility in soil:

Not considered mobile (active ingredient)

Adsorption/Desorption Coefficient:

Soil Koc= 8151 (test data for active ingredient).

Results of PBT and vPvB assessment:

No chemical safety assessment has been carried out.

13. DISPOSAL CONSIDERATIONS

General information: Waste is classified as hazardous waste. Disposal to licensed waste disposal site with the local Waste Disposal Authority.

Waste treatment methods: Waste is suitable for incineration. Contact specialist disposal companies. DO NOT reuse empty containers. Empty containers can be sent for disposal or recycling. Empty containers may contain residue and can be dangerous. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION.

14. TRANSPORT INFORMATION

Name of dangerous good transport regulations	UN	Shipping name	Class	Package	Lables	Others
Regulations of Vietnam - Decree 104/2009/NĐ-CP - Decree 109/2006/NĐ-CP - Decree 29/2005/NĐ-CP	3017	Organophosphorous pesticide, liquid, toxic, flammable.	6.1	III	6.1+3	Not available
Regulations of International: Sea transport (IMDG):	3017	Organophosphorous pesticide, liquid, toxic, flammable.	6.1	III	6.1+3	Not available

15. REGULATORY INFORMATION

UK Regulatory References:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

EU Legislation:

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substance and mixtures amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directive 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Health and Environmental Listings:

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006):

No specific restrictions of use are noted for this product.

Chemical safety assessments:

No chemical safety assessment has been carried out.

Risk phrases:

- R10 Flammable
- R65 Harmful: May cause lung damage if swallowed.
- R37/38 Irritating to respiratory system and skin
- R37 Irritating to respiratory system
- R38 Irritating to skin
- R66 Repeated exposure may cause skin dryness or cracking.
- R41 Risk of serious damage to eyes.

- R25 Toxic if swallowed
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapors may cause drowsiness and dizziness.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard statements:

- H318 Causes serious damage to eye
- H315 Causes skin irritation
- H226 Flammable liquid or vapour.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness and dizziness.
- H355 May cause respiratory irritation.
- EUH066 Repeat exposure may cause skin dryness or cracking
- H301 Toxic if swallowed
- H411 Toxic to aquatic life with long lasting effects
- H410 Very toxic to aquatic life with long lasting effects
- H400 Very toxic to aquatic life.

16. OTHER INFORMATION

Version 1

Revision Date 10/07/2014

Print Date 31/07/2014

Responsibility: HOP TRI AGROCHEMICAL. Co., Ltd

The information provided in this Material Safety Data Sheet is based on the appropriate and newest knowledges of pesticides. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

The pesticide stated within this MSDS might contain other hazardous properties depending on the usage and contacting context.

Hop Tri will disclaim all responsibility for use not right with instructions in this MSDS.