

DYNAMIC AGRIBUSINESS SDN. BHD.

(Co. No.: 544719-D)

No. 11-2, Jalan Meranti SD 13/4,

Bandar Sri Damansara,

52200 Kuala Lumpur, Malaysia

Tel.: 603-6272 9308 Fax: 603-6272 9528

SAFETY DATA SHEET

CHLORPYRIPHOS 38.7% EC

CAS Number: 2921-88-2

Trade Name: BARRIER GUARD

Chemical Name: O,O Diethyl-O-(3,5,6 trichloro-2-Pyridyl) Phosphorothioate

1. SUBSTANCES /PREPARATION AND COMPANY IDENTIFICATION.

Chemical Nature : Manufacturer of Agrochemicals/Alkyl Phenols/Fine chemicals.

Distributor : **Dynamic Agribusiness Sdn. Bhd.**

No. 11-2 Jalan Meranti SD 13/4, Bandar Sri Damansara

52200 Kuala Lumpur, Malaysia.

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2. COMPOSITION/ INFORMATION ON INGREDIENTS

Name of the Impurity	Concentration
CHLORPYRIPHOS A.I.	: 38.70%
Inert Ingredient	: <u>61.30%</u>
	<u>100.00%</u>

3. HAZARD IDENTIFICATION

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

R10

Harmful – R20/22

Harmful – R65

Irritant – R36/37/38

Dangerous for the environment- R50/53

Label elements

Labelling according to Regulations (EC) No 1272/2008 [CLP/ GHS]:

Hazard pictograms



Signal word: DANGER

Hazard statements

- H226 Flammable liquid and vapour
- H302 Harmful if swallowed
- H332 Harmful if inhaled
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H304 May be fatal if swallowed and enters airways
- H335 May cause respiratory irritations
- H336 May cause drowsiness or dizziness
- H410 Very toxic to aquatic life with long lasting effects

Supplemental Hazard Statements

EUH401 To avoid risks to human health and environment, comply with the instructions for use.

Precautionary Statements

- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P305 + P351+
P 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P331 DO NOT induce vomiting
- P501 Dispose of contents/ container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed of as non-hazardous waste.

4. FIRST AID MEASURES

Description of first aid measures

General advice: First aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Indication of any immediate medical attention and special treatment needed

Note to physician: Skin contact may aggravate preexisting dermatitis. Maintain adequate ventilation and oxygenation of the patient. Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration. Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. Attempt seizure control with diazepam 5-10 mg (adult) intravenous over 2-3 minutes. Repeat every 5-10 minutes as needed. Monitor for hypotension, respiratory depression, and need for intubation. Consider second agent if seizures persists after 30mg. if seizures persist or recur administer phenobarbital 600-1200 mg (adults) intravenous diluted in 60 ml 0.9% saline given at 25-50 mg/minute. Evaluate for hypoxia, dysrhythmia, electrolyte disturbance, hypoglycemia (treat adults with dextrose 100 mg intravenous). If exposed, plasma and red blood cell cholinesterase test may be indicate significance of exposure (baseline data are useful). If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. The decision of whether to induce vomiting or not should be made by a physician. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor or going for treatment.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

Unsuitable Extinguishing Media

: N.A.

Exposure Hazards

: Thermal decomposition products may include toxic oxides of carbon, Sulphur and Phosphorous.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate area. Refer to section 7, Handling, for additional precautionary measures. Only trained and properly protected personnel must be involved in clean-up operations. Keep personnel out of confined or poorly ventilated areas. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. Confined space entry procedures must be followed before entering the area. Vapor explosion hazard. Keep out of sewers. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. Ground and bond all containers and handling equipment. Use appropriate safety equipment.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterway and/or groundwater.

Methods for Cleaning: Contain spilled material if possible.

Small spills: Absorb with materials such as clay, dirt, sand. Sweep up. Pump with explosion proof equipment. If available, use foam to smother or suppress. Collect in suitable and properly labeled containers.

Large spills: Contact the correct person for clean-up assistance.

7. HANDLING AND STORAGE

Precautions for safe handling: Keep out of reach of children. Keep away from heat, sparks and flame. No smoking, open flames or sources of ignition in handling and storage area. Electrically ground and bond all equipment. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld or perform similar operations on or near empty containers. Do not get in eyes, on skin, on clothing. Avoid prolonged contact with eyes, skin and clothing. Wash thoroughly after handling. Do not swallow. Do not breathe vapor. Do not breathe dust or mist. Use only with adequate ventilation. Do not cut or weld container. Store in tightly closed container. Product shipped/ handled hot can cause thermal burns. Do not enter confined spaces unless adequately ventilated. Avoid contact with vapor from head space of containers. Cautiously vent pressure prior to opening container.

Conditions for safe storage: Store in dry place. Store in original containers. Keep container tightly closed when not in use. Do not store near food, foodstuff, drugs or potable water supplies. Minimize sources of ignition, such as static build-up, heat, spark or flame.

8. EXPOSURE CONTROL /PERSONAL PROTECTION

Engineering controls: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Eye/ Face protection: Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent.

Skin Protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron or full body suit will depend on the task.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air purifying or positive pressure supplied air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Homogeneous free flowing liquid free from extraneous impurities
Boiling point	: 156 - 157 °C
Odour	: Mercaptan
Auto flammability	: None
Density	: 1.4 at 25° C
Explosive property	: Inflammable
Solubility in water	: 2ppm at 25°C
Auto ignition	: None.
Vapour pressure	: 0.0000187 mmHg at 25°C
pH of 1% solution	: N. A.
Partition coefficient	: 50000
Viscosity	: 90 - 110 cps/50°C

10. **STABILITY AND REACTIVITY**

Conditions to Avoid : None reported

Materials to avoid : Alkaline metals and oxidizing agents.

Hazardous Decomposition: Thermal decomposition products may include toxic products
oxides of Carbon, Sulphur and Phosphorous

11. **TOXICOLOGICAL INFORMATION**

Acute LD₅₀ Oral Mice : 109.58 mg/kg WHO Class – III

Acute LD₅₀ Dermal Rabbits : 1233.15 mg/kg Toxicity Class – III

Acute LD₅₀ Inhalation (Rat, 4 hr.): 0.56 mg/l air.

Eye Irritation Rabbits : Very mild irritant.

Skin irritation, Rabbits : Non - irritant.

Sensitization : Weak sensitization agent

Carcinogenicity : None.

Mutagenicity : None.

Reproductive Toxicity : None.

12. **ECOLOGICAL INFORMATION**

LD₅₀ (96hrs) brown trout : 2.68 mg/l water.

D₅₀ (24hrs) Daphnia magna : 1.39 ug/l water.

Acute LD₅₀ Oral Birds : 17.7 mg/kg

Bee Toxicity : Toxic

% Biodegradability : 95 in 1 year.

Sewage Toxicity : Toxic.

13. **DISPOSAL CONSIDERATION**

Waste treatment methods

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. **TRANSPORT INFORMATION**

UN Number : 2783

Marine Pollutant : Yes.

IATA Packing Instruction: II

Flash point : Not applicable

First Aid Code : Not available.

15. **REGULATORY INFORMATION**

R10

Harmful – R20/22

Harmful – R65

Irritant – R36/37/38

Dangerous for the environment- R50/53

Safety Phrases : S2 Keep out of reach of children
S13 Keep away from food, drink and Animal feedings
S36 Wear suitable protective clothing.
S56 Dispose of this material and its container to hazardous or special waste collection point.
S62 If swallowed, do not induce vomiting, and seek medical advice Immediately and show this container label.

16 OTHER INFORMATION

The information contained in this safety data sheet is given in good faith. It is accurate to our best of knowledge and belief and represents the most up to date information. The information given in this date sheet does not constitute or replace the users own assessment of work place risk as required by other health and safety legislation.

Revised Date: January 2019