



Material Safety Date Sheet (MSDS) *Aciban 48 EC*

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common Name: Chloropyrifos
Trade Name: Aciban 48 EC
Chemical Name: 0,0- Diethyl 0 – (31516 – trichloro –2-pyridinyl)
phosphorothioate
Chemical Formula: C₉H₁₁CL₃NO₃PS
Molecular Weight: 350.6

PRODUCT COMPOSITION:

| <i>Active Ingredient:</i> | CAS # | % w/v |
|---------------------------|-------------|------------------|
| Chlorpyrifos | [2921-88-2] | 48% w/v |
| <i>Inert ingredient:</i> | | |
| Emulsifier | | 6% w/v |
| Solvent | | Up to 100% w/v . |





HAZARDS IDENTIFICATION:

- Most important hazards :** This compound inhibits cholinesterase
- Physical/chemical hazards :** Flammable.
- Human health hazards :** Harmful by inhalation and if swallowed.
Irritating to eyes and skin.
May cause sensitization by skin contact.
- Environmental hazards :** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

FIRE-FIGHTING MEASURES: -

Fire and Explosion Hazards: This product is classified as a C1 combustible product. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.

Fire decomposition products from this product may be toxic if it is inhaled. Take appropriate protective measures.

Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog. Avoid the use of water jets. Water fog or fine spray is the preferred medium for large fires. Ensure that no spillage enters drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash Point: > 42 °C

Upper Flammability Limit: No data

Lower Flammability Limit: No data

Autoignition temperature: No data

Flammability Class: C1

FIRST-AID MEASURES:

INHALATION: If symptoms of poisoning become evidence, call a doctor. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Do not allow victim to move about unnecessarily. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

EYE CONTACT: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding





the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

SKIN CONTACT: Flush contaminated area with lukewarm, gently flowing water at least 20-30 minutes, by the clock. Do not interrupt flushing. If necessary, keep emergency vehicle waiting. Under running water, remove contaminated clothing, shoes and lather goods. If breathing has stopped, trained personal should be beginning artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation immediately

INGESTION: if swallowed Call a physician immediately drink one to two glass of water to induce vomiting by touching the back of throat with finger, repeat until vomit is clear.

NOTES TO A PHYSICIAN

Give the atropine sulfate after consulted physician.

ACCIDENTAL RELEASE:

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personal. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. Suitable material for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant change that vapors or mists are likely to build up in the cleanup area, we recommended that you use a respirator.

PERSONAL PROTECTION/SAFTETY:

Ventilation: this product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

Eye Protection: Protective glasses or goggles should be worn when this product is being used. Failure to protect your eye may cause them harm.

Skin Protection: It is essential that all skin areas are adequately covered by impermeable gloves, overalls, hair covering, and apron and face shield.

Protective Material Types: We suggest that protective clothing be \made from the following materials: rubber, PVC.

Respirator: Where there is a risk of exposure to this product, we recommended that you use a respirator. IT should be fitted with a type G cartridge, suitable for agricultural chemicals.

HANDLING AND STORAGE:





Handling: Keep exposure to this product to a minimum, and minimize the quantities kept in work areas.

Storage: Store in cool, well ventilated area. Check containers periodically for leaks. Containers should be kept closed in order to minimize contamination.

STABILITY AND REACTIVITY:

Stability: Stable under normal conditions.

Conditions to avoid: sun light and excessive heat. Avoid temperatures above: 75°C.

Materials to avoid: Strong oxidizing agents, strong acids, strong bases,

Hazardous reactions: Hazardous polymerization will not occur.

Hazardous decomposition products: CO, CO₂, SOX, NOX, POX, HCl, Chlorides and Sulfides.

TOXICOLOGICAL INFORMATION:

Acute toxicity - Oral. : LD50 = 409 mg/kg (rat)

Acute toxicity - Dermal: LD50 > 2000 mg/kg (rat).

Acute toxicity - Inhalation: LC50 = 2.62 mg/l, 4 hours (rat).

Skin irritation: irritating to skin (rabbit).

Eye irritation: Irritating to eyes (rabbit).

Sensitization: Guinea pig maximization test: May cause sensitizer.

Common name: Chlorpyrifos

Carcinogenicity: Not carcinogenic.

Mutagenicity: Not mutagenic.

Reproduction toxicity: Not teratogenic in animal experiments.

ECOLOGICAL INFORMATION: -

Effect on birds: Chlorpyrifos is moderately to very highly toxic to birds.

Effect on aquatic organisms: Chlorpyrifos is very highly toxic to freshwater fish, aquatic invertebrates and estuarine and marine organisms. Cholinesterase





inhibition was observed in acute toxicity tests of fish exposed to very low concentration of this pesticide.

Effect on other organisms: Aquatic and general agricultural uses of Chlorpyrifos pose a serious hazard to wildlife and honeybees.

Environmental Fate:

Mobility: Not mobile.

Persistence/degradability: Half-life time ($t_{1/2}$): 80-279 days, (soil) .

Bioaccumulative potential: Chlorpyrifos does not bioaccumulation in aquatic organisms

DISPOSAL CONSIDERATIONS:

Disposal: There are many pieces of legislation covering waste disposal and they differ in each state and territory, so each user must refer to laws operating in their area.

The product label will give general advice regarding disposal of small quantities, and how to cleanse containers.

REGULATORY INFORMATION:

Proper shipping name: Organophosphorus pesticide, liquid, toxic, flammable, Chlorpyrifos.

ADR/RID Class: 6.1

Packing group: III

Hazard Identification Number: 63

