

DYNAMIC AGRIBUSINESS SDN. BHD.
(Co.No: 544719-D)
No.11-2, Jalan Meranti SD 13/4,
Bandar Sri Damansara,
52200 Kuala Lumpur, Malaysia.
Tel.: 03- 6272 9308 Fax: 03-6272 9528
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SAFETY DATA SHEET

DELTA METHRIN 1.0% SC

CAS Number: 52918-63-5

Trade Name : DELTRINET SC

Common Name : Deltamethrin

Chemical Name : (S) - α -Cyano -3 - Phenoxybenzyl (1R3R) - 3 - (2,2 dibromovinyl) - 2,2 dimethyl Cyclopropane carboxylate

Chemical Formula : C₂₂H₁₉Br₂NO₃

Molecular Weight : 422.9

1. SUBSTANCE/ PREPARATION AND COMPANY IDENTIFICATION

Chemical Nature: Insecticide

Distributor: **Dynamic Agribusiness Sdn. Bhd.**
No.11-2, Jalan Meranti SD 13/4
Bandar Sri Damansara,
52200 Kuala Lumpur
Malaysia.

Tel.: 03-6272 9308 Fax: 03-6272 9528

2. COMPOSITION/ INFORMATION ON INGREDIENTS

S. No.	Ingredient	Concentration (%) w/w
i.	Deltamethrin	1.00 Minimum
ii.	Inert ingredient	99.00 Minimum

3. HAZARDOUS IDENTIFICATION

Signal Word: Caution

Hazard Statement:
Harmful if inhaled
Toxic to aquatic organisms

Pictogram



Precautionary Statements:

Avoid breathing vapors/ spray. Use only in a well-ventilated area. If inhaled: remove victim to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.

4. FIRST AID MEASURES

- Ingestion : Remove by gastric lavage and catharsis. Maintain blood pressure and airway. Give Oxygen if respiration is depressed. Do not perform gastric lavage on victims, if unconscious. Get medical attention immediately.
- Inhalation : Remove from exposure area to fresh air immediately. If breathing has stopped perform artificial respiration. Keep person warm and at rest Get medical attention immediately.
- Eye Contact : Wash eyes immediately with large amounts of water or normal saline occasionally lifting lower and upper lids until no evidence of chemical remains.
- Skin Contact: : Remove contaminated clothing and shoes immediately. Wash effected area with soap and mild detergent and large amounts of water until no evidence of chemical remains. Get medical attention.
- Antidote/Dosages : No specific antidote. Treat symptomatically and supportively.
- Spills steps to be taken : Stop leak if can be done without risk. For small leak take up with sand in other absorbent material and place into containers for later disposal. For larger spill dike fire ahead of spills for collection and late disposal.

5. FIRE FIGHTING MEASURES

- Fire Extinguishing media : Dry Chemical, Carbon dioxide, Water spray or standard foam
- Special procedure : Move containers from fire area if can be done without risk. Keep upwind. Do not breather vapors. Use personal protective equipment.
- Unusual Hazards : May exit toxic and corrosive fumes of Bromides and toxic of Carbon and Nitrogen

6. ACCIDENTAL RELEASE MEASURES

In the event of a major spill, prevent spillage from entering drains or water courses. Contain and absorb spilled material with absorbent material such as sand clay or cat litter and dispose of waste as indicated below. Wear full protective clothing including face mask, face shield, and gauntlets. All skin areas should be covered. Suitable materials for protective clothing include rubber, PVC, Viton. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. HANDLING AND STORAGE

Safe handling practices : Exercise safe handling practices at all times.

Storage

Store in a cool, dry, well ventilated location. Avoid excess heat. No smoking eating or drinking should be allowed where material is used or stored. Keep out of the reach of children and animals. Store in original containers only. Do not locate near or contaminate food or feed by storage or disposal. Wash all exposed skin surfaces prior to smoking, drinking or eating. All workers should shower at the end of each work day after handling this product. Wash all clothing after each use.

8. FIRE AND EXPLOSION HAZARD DATA

Flammability	: No		
Flash Point °C (OC)	: Not applicable	UEL%	: NA
Flash Point °C (CC)	: Not applicable	UEL%	: NA
Auto-Ignition Temperature	: NA	TDG flammability Classification	: NA
Exposition sensitivity to impact	: NA		
Explosion sensitivity to static electricity	: NA		
Hazardous combustion products	: May include toxic and corrosive fumes of Bromides and toxic oxides of Carbon and Nitrogen		
Hazardous polymerization	: Has not been reported to occur		
Combustible liquid	: No	Explosive material	: N.A
Flammable Material	: No	Oxidizer	: NA
Pyrophoric material	: NA	Organic peroxide	: NA
Corrosive Material	: NA	Others	: NA

9. PHYSICAL AND CHEMICAL DATA

Physical state	: Liquid	Boiling Point OC	: 107 °C
Appearance	: Off-white liquid	Flash point	: Not applicable
Odor	: Odorless	Solubility in water at 20°C	: Forms suspension
Vapor Pressure	: NA	Evaporation rate	: NA
Vapor Density	: NA	pH	: 0.02
Specific Gravity (20°C)	: 1.06 g/ml	Others	: Soluble in Most organic solvent.
Odor threshold (ppm)	: NA		

10. REACTIVITY DATA:

Chemical stability (if no, under what condition)	: Yes, shelf life 2 years.
Incompatibility with other materials (if yes, which ones)	: Strong Oxidizers (for 100% tech)
Reactivity and under what condition	: Under UV irradiation and in sunlight, a cis-trans isomerization, splitting of the ester bond, and loss of Bromine occurs.
Hazardous reaction/decomposition products	: May include toxic and corrosive fumes of Bromide and toxic oxides of carbon & Nitrogen.

11. TOXICOLOGICAL INFORMATION

Route of entry : Inhalation ingestion, skin & eyes

Effects of Exposure : (For 100% technical) Inhalation to a mist may produce hypersensitivity, Ataxia and urinary incontinence convulsions may also be possible. On skin primary irritation is unlikely, Cutaneous Parenthesis may occur including numbness, itching, burning and warmth without signs of irritation. May cause irritation in eyes. Ingestion in rabbits caused pathological changes in Thymus cortex, Liver adrenal glands and lungs

Permissible Exposure limit NA ppm NA mg/m³
 TLV (ACGI) NA ppm NA mg/m³ STEL NA ppm NA mg/m³

.Acute LD50 (Oral rat) : > 4000 mg/kg
 Acute Dermal LD50 (Rabbit) : >2000 mg/kg b.w.
 Skin Irritation : Mild irritant
 Eye Irritation : Mild irritant
 Fish LC50 (Carp) (96h) : 49.50 mg/l
 Acute EC50 Daphnia (24h) : 1.82 mg/l

NFPA Hazard signals Health – 4 Flammability 1
 (Scale 0-4) Stability /reactivity 0 Special -
 (For 100% tech)

12. ECOLOGICAL INFORMATION

Effects on Birds: The reported 8-day LC50 for deltamethrin for ducks was greater than 4640 mg/kg diet: and greater than 10,000 mg/kg diet for quail.

Effects on Aquatic Organisms: As is common with all pyrethroids, deltamethrin has a high toxicity to fish under laboratory conditions. However, in field conditions under normal conditions of use, fish are not harmed. Deltamethrin had an impact on aquatic herbivorous insects. This impact led to an increase of algae. Although the fish (fathead minnows) accumulated the deltamethrin, no mortality could be observed. In laboratory trials, the LC50 for fish was 1-10 micrograms/l. aquatic fauna, particularly crustacean, may be affected, but fish are not harmed under normal conditions of use.

Effects on Other Animals (Non-target species): Deltamethrin is considered toxic to bees. The 24h oral LD50 for technical fed to bees was 0.079 µg/bee.

Environmental Fate: Breakdown of chemical in soil and groundwater: In soil, degradation occurs within 1-2 weeks.

Breakdown of Chemical in Surface Water: Deltamethrin in pond water was rapidly adsorbed, mostly by sediment, in addition to uptake by plants and evaporation into the air.

13. DISPOSAL CONSIDERATION

Waste Treatment Methods

Product: Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

If these wastes cannot be disposed by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated Packaging:

Triple rinse containers

Add washings to sprayer at time of filling.

Puncture container to avoid re-use.

Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State/ Provincial and local authorities, by burning.

If burned, stay out of smoke.

Follow advice on product label and / or leaflet.

RCRA Information: Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

14. TRANSPORT INFORMATION:

Engineering controls E.g. Ventilation, enclosed process etc.	:	Provide local exhaust or general dilution ventilation system.
Handling and storage Precautions	:	Store in a cool dry well ventilated area in tightly closed containers away from incompatible materials in a flameproof area.
Shipping Name	:	DELTAMETHRIN 1.0% SC W/W
IMDG Class	:	6.1
IMDG page No.	:	6219
U.N. No.	:	2903
Handling & Storage Cautions	:	Avoid contact with mouth, eyes and skin especially with undiluted EC. : Store in original containers away from foodstuffs & animal Feed.
SIGNAL	:	WARNING
TOXICITY CLASS	:	III

15. REGULATORY INFORMATION

FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION

Harmful if inhaled. Avoid breathing vapor or spray mist. Contact with product may result in transient tingling and reddening of the skin. Remove contaminated clothing and wash before reuse.

16. DISCLAIMER:

Information contained in this safety data sheet is believed to be reliable but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them.

It is up to the manufacturer/seller to ensure that the information contained in the safety data sheet is relevant to the product manufactured/handled or sold by him as the case may be. This information is intended to describe safety requirements and not to be taken as warranty implied in respect of the adequacy of the documents.

Notes:

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|--------------|---|--|
| 1. CAS | - | Chemical Abstract Service Number |
| 2. UN | - | United Nations Number |
| 3. LD50 | - | Lethal Dose – 50% (Specify animal species and route for tests) |
| 4. LC50 | - | Lethal Concentration 50% (Specify animal species and routes for tests) |
| 5. TDG | - | Transport of dangerous goods flammability. |
| Flammability | | Classification by United Nations. |
| 6. NFPA | - | National Fire Exposure Limit |
| 7. STEL | - | Short Term Exposure Limit |
| 8. ACGIH | - | American Conference of Government Industrial Hygienists |
| 9. TLV | - | Threshold Limit Value |
| 10. NA | - | Not Available |

Revised Date: January 2019