

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name : Cypermethrin 3% + Dimethoate 25% EC
Chemical Name : (RS)-a-cyano-3-phenoxybenzyl (1 RS, 3RS; 1RS, 3SR) -3- (2, 2-dichlorovinyl)-2, 2-dimethyl cyclopropanecarboxylate; O,O-dimethyl S-methylcarbamoylmethyl phosphorodithioate.
Type : Insecticide
Molecular formula : $C_{22}H_{19}Cl_2NO_3$; $C_5H_{12}NO_3PS_2$

2. Composition/Information on ingredients

Chemical Name	CAS#	Percent or content(w/v)
Cypermethrin	52315-07-8	3.0%
Dimethoate	60-51-5	25.0%
Emulsifier and solvent	-	72.0%

3. Health Hazards Identification

Cypermethrin:

Moderate-irritant to eyes, Non-irritant to skin, Harmful if swallowed. Can cause stomach irritation resulting in nausea, cramps and vomiting. Large doses may cause nasal and respiratory irritation. May be fatal if inhaled.

Dimethoate:

Harmful by inhalation and if swallowed.

4. First Aid Measures

Ingestion	Do not induce vomiting. If victim is fully conscious, immediately give 1 or 2 glasses of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.
Skin	Remove contaminated clothing; wash affected area(s) with soap and water. Get medical attention, if irritation persists. Wash contaminated clothing with detergent before reuse.
Inhalation	Remove the victim to fresh air. If breathing difficulty experiences, provide artificial respiration. Consult medical personnel.
Eye irritation	Hold eye open and rinse gently with fresh water for 15-20 minutes. If irritation persists, consult a medical Physician. Remove contact lenses if worn.
Antidote	No specific antidote is known. Treat symptomatically.

5. Fire Fighting Measures

Flash point: >40°C

Fire and explosion hazard

Thermal decomposition products may emit toxic fumes of hydrogen oxides and oxides of carbon.

Fire Fighting Media

Dry chemicals, carbon dioxide, and alcohol foam or water spray.

Extinguishing Procedure

Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses.

Caution

Wear positive-pressure, self-contained breathing apparatus

6. Accidental Release Measures

Small Spill:

Sweep or vacuum up spillage and collect in suitable container for disposal.

Large Spill:

Prevent further leakage or spillage. Use approved industrial vacuum cleaner for removal. Shovel into suitable container for disposal.

7. Handling and Storage

Handling

- Wear chemically impervious gloves such as neoprene or nitrile.
- Wear safety glasses, goggles or face shield.
- Mechanical ventilation should be used when handling this product in enclosed spaces.
- Read and observe all precautions and instructions on the label.

Storage

- Store in original containers, upright and closed.
- Store in areas that are cool, dry and well ventilated.
- Store away from seeds, fertilizers and animal feed stuff.

8. Exposure Controls/Personal Protection

Respiratory	: Approved respirator
Eye and face	: Safety goggles or face shield.
Hands	: Gloves
Body	: Apron boots and hat.
Ventilation	: Provide local exhaust.
Industrial hygiene	: Safety shower and eye wash should be provided at work place. Do not eat, drink or smoke while working. Wash hands before meals and after work with soap.

9. Physical and Chemical Properties

State	: Liquid
Melting point	: -2.8-1.7°C
Vapour pressure	: 0.93-0.98 @ 20 °C
Persistent foaming	: 25 ml
Flash Point	: >40°C

10. Stability and Reactivity

Stability	: Relatively stable in neutral and weakly acidic media with optimum pH 4. Dimethoate: Stable in aqueous media at pH 2 to 7.
Incompatibility	: Protect from direct contact with fertilizers, always dilute first.

11. Toxicological Information

Acute toxicity (Cypermethrin) A.I.

Rats Oral LD ₅₀	: >250-4150 mg/kg bw
Rats Skin LD ₅₀	: >4920 mg/kg
Rats Inhalation LC ₅₀	: 2.5 mg/l
Rabbits Skin irritation	: Non irritant
Rabbits Eye irritation	: Moderate irritant
Skin Sensitization	: Weak sensitizer

Acute toxicity (Dimethoate) A.I.

Rats Oral LD ₅₀	: 387 mg/kg bw
Rats Skin LD ₅₀	: >2000 mg/kg
Rats Inhalation LC ₅₀	: >1.6 mg/l air
Rabbits Skin irritation	: Non irritant
Rabbits Eye irritation	: Non irritant
Skin Sensitization	: Non sensitizer

12. Ecological Information

Cypermethrin:

Cyprinus carpio, 96 hours	: LC50: 0.53
Daphnia magna, 24 hours	: EC50: 0.13
Chlorella vulgaris, 72 hours	: EC50: 26.41
Bees, 24 hours (oral)	: LD50: 0.035

Dimethoate:

Fish (Rainbow trout)	: LC50: 30.2 mg/l
Bird (Mallard duck)	: LD50: 72 mg/kg b.w.
Daphnia	: EC50: 2 mg/l
Algae	: EC50: 90.4 mg/l

13. Disposal Considerations

Disposal method: Do not empty into drains or waterways. Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.

14. Transport Information

Product Name	:	PESTICIDES, LIQUID, TOXIC, FLAMMABLE
UN No.	:	3017
UN Hazard Class	:	6.1
UN Packing Group	:	III
Marine Pollutant status	:	YES
EMS	:	F-E, S-D

15. Regulatory Information

Classification	:	Xn: Harmful
N	:	Dangerous for the environment
Risk Phrases		
R10	:	Flammable
R22	:	Harmful if swallowed
R43	:	May cause sensitization by skin contact.
R50/53	:	Very toxic to aquatic organisms
Safety Phrases		
S2	:	Keep out of the reach of children
S24	:	Avoid contact with skin
S36/37/39	:	Wear suitable protective clothing,

S60 : gloves and eye/face protection
This material and its container must be
disposed of as hazardous waste

16. Other Information

The data presented in this material safety data sheet are believed to be correct and faithful. Agrow Allied Ventures Pvt. Ltd., do not make guarantee or warranties of any kind regarding the completeness or accuracy thereof.

PREPARED BY: Agrow Allied Ventures Pvt. Ltd., SAFETY DIVISION

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