



BR AGROTECH LIMITED

Regd. & Corp. Off. : 1505, Vikram Tower, Rajendra Place, New Delhi-110008
Phones : 43661111, 41538383 • Fax : +91-11-25727781, 43661100
E-mail: info@bharatgroup.co.in • Website : www.bharatgroup.co.in
CIN : U74899DL2000PLC103860

MATERIAL SAFETY DATA SHEET

Manufacturer B.R. Agrotech Limited
1505, Vikram Tower,
Rajendra Place
New Delhi – 110008, India

1. PRODUCT IDENTIFICATION

Product Lambdacyhalothrin 5% EC

Intended Use Insecticide

IUPAC Name A reaction product comprising equal quantities of (S)- α -cyano-3-phenoxybenzyl (Z)-(1R,3R)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate and (R)- α -cyano-3-phenoxybenzyl (Z)-(1S,3S)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate Roth: (S)- α -cyano-3-phenoxybenzyl (Z)-(1R)-cis-3-(2-chloro-3,3,3-trifluoropropenyl)-2,2-dimethylcyclopropanecarboxylate and (R)- α -cyano-3-phenoxybenzyl (Z)-(1S)-cis-3-(2-chloro-3,3,3-trifluoropropenyl)-2,2-dimethylcyclopropanecarboxylate (1:1)

Chemical formula $C_{23}H_{19}ClF_3NO_3$

2. CHEMICAL COMPOSITION

Chemical Name	CAS No.	Content (%w/w)
Lambdacyhalothrin	91465 – 08 – 6	5% min
Other Ingredient	–	95 % Max



(AN ISO 9001:2008 & 14001:2004 CERTIFIED COMPANY)

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3. HAZARDOUS IDENTIFICATION

Skin	Non irritant
Eyes	Non irritant
Environmental Hazard	Noxious for animals. Do not contaminate water courses.

4. FIRST AID MEASURES

Eyes	Flush eyes with plenty of cold water.
Skin	Wash with plenty of soap and water.
Ingestion	Induce vomiting if swallowed by tickling back of the throat with the finger.
Inhalation	Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.
Note To Medical Doctor	No specific antidote, treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Sprayed water jet, foam, extinguishing powder, CO ₂ , Sand. Fight fire in early stages if safe to do so.
Well ventilated areas	Full face mask with combination filter, e.g. ABEK-P2 (offers no protection from carbon monoxide!)
Fire Fighting Procedures	Respirator with independent air supply. Contain firefighting water. In the event of fire, the formation of hydrogen chloride, hydrogen cyanide, carbon monoxide, sulphur dioxide and nitrogen oxides must be anticipated.

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6. ACCIDENTAL RELEASE MEASURES

Release Notes

Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed accordingly. Keep unprotected persons and animals out of the area. Keep material out of lakes, streams, and ponds. Large spills should be covered to prevent dispersal. To clean and neutralize contaminated area, scrub area with a solution of detergent (e.g. commercial product such as Super soap, Tide or other high pH detergents) and water. Repeat if necessary to remove visible staining. Applying bleach to affected area can make additional decontamination.

7. HANDLING AND STORAGE

Handling And Storage

Store in a cool, dry, well ventilated place. Do not use or store near heat, open flames or hot surfaces. Store in original containers only. Keep out of the reach of the children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

No open flames. Prevent deposition of dust. Use closed system, consider use of explosion-proof electrical equipment and lighting. Use local exhaust at all process locations. Ventilate all transport vehicles prior to unloading.

Eyes And Face

For protection against exposure, wear chemical protective goggles or a face shield.

Respiratory

For protection against exposures wear, as a minimum, a properly fitted half – face or full face air purifying respirator, which is approved



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for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentration.

Protective Clothing

Depending upon concentration encountered, wear coveralls or long – sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC SUIT. Leather items – such as shoes, belts and watchbands – that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

Gloves

Wear chemical protective gloves made of material such as rubber or neoprene. Thoroughly wash the outside of gloves soap and water prior to removal. Inspect regularly for leaks.

Work Hygienic Practices

Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum, or using tobacco. Shower at the end of the workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Colour	Yellow to Light Yellow
Solubility in Water	Emulsible

10. STABILITY AND REACTIVITY

Conditions To Avoid	Excessive heat and fire.
Stability	Stable under NTP conditions

Symbol of Quality



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11. TOXICOLOGICAL INFORMATION

Acute Oral LD50 Rat	200 mg/kg bw.
Acute Dermal LD50 Rat	>2000 mg/kg
Acute Inhalation LC50 Rat	5 mg/l air
Skin irritation (Rabbit)	Non irritant
Eye irritation (Rabbit)	Non irritant

12. ECOLOGICAL INFORMATION

Toxicity to Quail (MLD)	>5300 mg/kg
Toxicity to Bee (LD50)	909 ng/bee
Toxicity to Fish (LC50)	0.36 µg/l
Toxicity to Daphnia	0.36 µg/

13. ISPOSAL CONSIDERATIONS

Disposal Method Open dumping or burning of this material or its packing is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

Empty Container Completely empty package into application equipment then dispose of empty package in accordance with all Federal, State and local regulations.



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14. TRANSPORT INFORMATION

ADR/RID Classification

Proper shipping Name Pesticide Liquid Toxic N.O.S (Contains Lambdacyhalothrin)

UN No. 3349

Packing Group III

Hazard Class 6.1

IMDG Classification

Proper shipping Name Pesticide Liquid Toxic N.O.S (Contains Lambdacyhalothrin)

UN No. 3349

Packing Group III

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IATA/ICAO Classification

Proper shipping Name Pesticide Liquid Toxic N.O.S (Contains Lambdacyhalothrin)

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15. REGULATORY INFORMATION

Xn



Harmful or Irritant

N



Dangerous for environment

Hazard symbol	Xn, N
Risk Phrase	R21 Harmful in contact in skin
Safety Phrase	S2 Keep out of reach of children
	S60 This material and its container must be disposed of as hazardous waste
	S61 Avoid release to the environment. refer to special instructions/safety data sheets

16. OTHER INFORMATION

This MSDS summarises best knowledge of the health and safety hazard information of the product. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. The responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Date: 25 – 4– 2014

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