

MATERIAL SAFETY DATA SHEET

GRAP 2.5/2% EC

SECTION 1. IDENTIFICATION OF THE SUBSTANCE

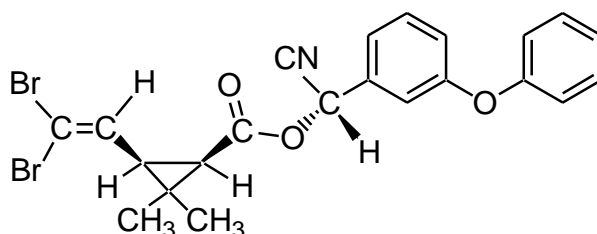
Common Name:A) Deltamethrin

Chemical Name:

[1*R*-[1 α (*S*^{*}),3 α]]-cyano(3-phenoxyphenyl)methyl

3-(2,2-dibromoethenyl)-2,2-dimethylcyclopropanecarboxylate

CAS No. 52918-63-5



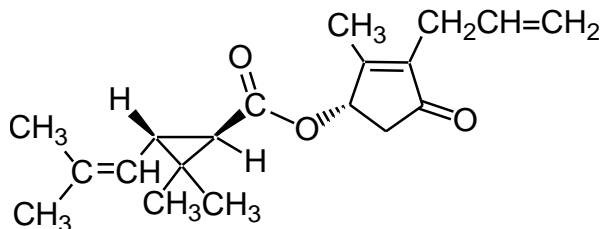
Common Name:B) S-Bioallethrin

Chemical name :

[1*R*-[1 α (*S*^{*}),3 β]]-2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl

2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate

CAS No. 28434-00-6



SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Conc.	Uses
Inert ingredient		
Deltamethrin	2.5%	To control of Flying insects
S-Bioallethrin	2%	
Inert ingredient		
Solvent, Surfactants	95.5%	
TOTAL	100%	

SECTION 3. HAZARDS IDENTIFICATION

Effects of Overexposure

Harmful if swallowed or inhaled, Symptoms of overexposure maybe include Burning sensation, Convulsions, Cough, Laboured breathing, Shortness of breath, Sore throa, Abdominal pain, Cough, Headache, Dizziness, Nausea, etc. Skin and eye: redness and pain. Irritating to eyes and skin.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

SECTION 4.FIRST AID MEASURES

Ingestion	If victim is conscious and alert, give 2-3 glasses of water to drink and induce vomiting by toughing back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Seek immediate medical attention.
Eye	rinse with water for 15-20minutes.
Skin	Rinse skin immediately with plenty of water for 15-20 minutes.
Inhalation	If inhaled, move person to fresh air. If person is not breathing, give artificial respiration, preferably mouth-to-mouth if possible.
Note to physician	No special antidote. Treat symptomatically.

SECTION 5.FIRE FIGHTING MEASURES

Flash point:	≥90°C
Flammability:	Flammable
Extinguishing media:	Foam, Carbon dioxide, Dry chemical
Thermal decomposition products:	Non known
Special fire fighting methods:	Use self contained breathing apparatus
Unusual fire or explosion hazards:	
During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion..	

SECTION 6.ACIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Spills should be cleaned up immediately. Large spill: dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimize runoff into waterways or drains.

SECTION 7.HANDLING AND STORAGE

Store the material in a well ventilated, secure area out of reach of children and domestic animals. Do not store food, drink in areas where they may become contaminated with this material. Keep container tightly closed. Keep away from heat, sparks and flames. Wash thoroughly after handling.

SECTION 8.EXPOSURE CONTROL/PERSONAL PROTECTION

Applicators and other handlers must wear:

Coveralls over short-sleeved shirt and short pants.
Chemical-resistant footwear plus socks.
Chemical-resistant gloves, such as barrier laminate or butyl rubber.
Protective eyewear.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Color	liquid yellow
Persistent foam test	Accepted (CIPAC F p. 140 MT43)
Density	0.87 gm/cm ³ (CIPAC F p.11 MT 3)
pH value	5.2:5.8 (CIPAC F p.205 MT 75)
Corrosion properties	Non corrosion
Flash point	85°C

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:	Stable at normal temperatures and storage conditions.
Condition to avoid:	None known
Materials to avoid:	None known
Polymerization:	Polymerization will not occur.
Hazardous decomposition products:	May decompose at high temperatures forming toxic gases.

SECTION 11. TOXICOLOGICAL INFORMATION

Ingestion:	Acute Oral LD50 for rats 784 mg/kg
Dermal:	Acute Dermal LD50 for rabbits >2000 mg/kg
Inhalation:	LC50 for rats >4.9mg/l
Skin contact:	Irritating to skin (rabbits)
Eye contact:	Irritating to eye (rabbits)
Skin sensitization:	Not a skin sensitizer (Guinea pig)
Other:	Non-mutagenic, non-teratogenic; no adverse effect on reproductive performance. Not neurotoxic.
Toxicity class:	WHO (a.i.) II

SECTION 12. ECOLOGICAL INFORMATION

This product is highly toxic to fish, aquatic organisms and honeybees, but practically non-hazardous because of its low recommended rate of use. Low toxic to birds, Acute LD50 for mallard duck >5000mg/kg. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not contaminate water by cleaning of equipment

SECTION 13. DISPOSAL INSTRUCTION

Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are acutely hazardous. Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning. If allowed by state and local authorities, by burning. If burned, stay out of smoke.

SECTION 14. TRANSPORT INFORMATION

Transport Classification: Road & Rail (ADG), Sea (IMDG)

UN NO.: 3082

Shipping Name: Pyrethroid Pesticide, liquid, toxic, Flammable, N.O.S.

UN class: 9

Packing Group: III

Other Info: Deltamethrin, Maring Pollutant

SECTION 15. REGULATORY INFORMATION

Acute: Yes

Chronic: Yes

Fire: Yes

Read and follow all label directions.

SECTION 16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements.

Use according to label instructions.