

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** EMAMECTIN BEZOATE 5% SG  
**Use / description of product:** Use as an agricultural/horticultural insecticide  
**Company name:** INDOFIL INDUSTRIES LIMITED  
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Kondivita Road, Off. Andheri Kurla Road, Andheri (E),  
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**2. HAZARDS IDENTIFICATION**

**GHS Classification**  
**Hazard Symbol**



**Signal word:**  
Hazard statement(s):

**WARNING**

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/  
spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this  
product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face  
protection.  
P284 Wear respiratory protection.  
P301 + P312 IF SWALLOWED: Call a POISON  
CENTER or doctor/ physician if you feel unwell.  
P302 + P352 IF ON SKIN: Wash with  
plenty of soap and water.  
P304 + P340 IF INHALED: Remove victim to fresh air  
and keep at rest in a position comfortable for  
breathing.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<b>Chemical name</b>	<b>CAS</b>	<b>%</b>
Active ingredient (Emamectin Benzoate)	155569-91-8	5
Other ingredients	-----	QS

#### 4. FIRST AID MEASURES

**Most Important symptoms and effects, both acute and delayed**

**Skin contact**

There may be mild irritation at the site of contact

**Eye contact**

There may be irritation and redness.

**Ingestion**

There may be soreness and redness of the mouth and throat

**Description of first aid measures**

**In general**

Never give fluids or induce vomiting if patient is unconscious or is having convulsions. Seek medical advice immediately (show the label where possible)

**After Ingestion**

Do not induce vomiting. Provided the patient is conscious. Wash mouth with water and give plenty of water to drink. Consult a physician or Doctor if victim feels unwell.

**After eye contact**

Flush eyes thoroughly with water for several minutes. Remove contact lenses after initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**After skin contact**

Immediately wash skin with soap and plenty of water. Consult a physician if irritation develops.

**After Inhalation**

Remove to fresh air. Consult a physician if irritation develops

**Indication of any immediate medical attention and special treatment needed**

Supportive care. No specific antidote. Treatment based on judgement of physician, in response to symptoms of patient.

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing media:**

Water spray. Carbon dioxide. Dry chemical powder.

**Exposure hazards:**

May form flammable / explosive dust-air mixture. In combustion emits toxic fumes of sulphur Oxides, nitrogen oxides, carbon dioxide / carbon monoxide.

**Protection of fire-fighters:**

Wear self-contained breathing apparatus. Run-off from fire control may be a pollution hazard. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Eliminate all sources of ignition. Do not create dust.

**Environmental precautions:**

Do not discharge into drains or rivers. Contain the spillage using bunding.

**Clean-up procedures:**

Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Do not use equipment in clean-up procedure, which may produce sparks.

#### 7. HANDLING AND STORAGE

**Handling requirements:**

Ensure there is sufficient ventilation of the area. Smoking is forbidden. Use non-sparking tools.

**Storage conditions:** When handling do not eat, drink or smoke.  
Store in cool, well-ventilated area. Keep away from sources of ignition. Keep container tightly closed. Keep in original containers, out of reach of children Never allow the product to become wet during storage. This may lead to chemical changes, which will reduce the effectiveness as an insecticide and could create flammable vapours.

**Suitable packaging:** Must only be kept in original packaging.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Wear approved respirator.

**Hand protection:** Protective gloves  
Requirements can vary as a function of the use. Therefore, it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

**Eye protection:** Safety goggles.

**Skin protection:** Mixers and loaders must wear overalls , protective goggles and chemical-resistant apron.  
Applicators and other handlers must wear overalls, goggles and waterproof gloves. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Solid

**Colour:** White to tan

**Odour:** Odourless

**Solubility in water:** Soluble in water

**pH** 5 to 8 (1% dispersion)

**Melting point °C:** No data

### 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Excessive temperatures.

**Hazardous decomp. products:** Decomposition on heating above 22°C. Decomposed on heating in alkaline media with the formation of copper oxides. Decomposition will evolve toxic and irritant vapors.

### 11. TOXICOLOGICAL INFORMATION

**Hazardous ingredients:** EMAMECTIN BENZOATE

Acute toxicity (Assessment largely or completely based on data for active substance)

Acute Oral LD <sub>50</sub> (Rat)	1516 mg/kg
Acute Dermal LD <sub>50</sub> (Rat)	> 2000 mg/kg
Acute Inhalation LD <sub>50</sub>	> 6.28 mg/L (4h)
EYE Irritation (Rabbit)	Mild irritation.
SKIN Irritation (Rabbit)	Slight Skin irritant
Skin Sensitization (Guinea Pig)	Not a skin sensitizer.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity: (Assessment largely or completely based on data for active substance)**

<b>Aquatic toxicity :</b>	Material is very toxic to aquatic organisms.
<b>Fish</b>	
LC <sub>50</sub> (96 h.)	6.8 mg/L for Carp
<b>Daphnia</b> EC <sub>50</sub> (48 hr)	0.08 mg/L
<b>Green Algae</b>	Material is practically non-toxic to birds.
Acute Oral, LD <sub>50</sub>	Salenostrium capricomutum 28.4 mg/L
<b>Environmental Fate</b>	
<b>Persistence and Degradability:</b>	Not persistent in water
<b>Bio-accumulation potential:</b>	Not persistent in water
<b>Mobility in soil:</b>	Not mobile in soil.

## 13. DISPOSAL CONSIDERATIONS

<b>Product:</b>	Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.
<b>Contaminated Packaging:</b>	Empty remaining contents. Triple rinse containers. Empty containers should be taken for local recycling or waste disposal. Do not re-use empty containers.
<b>NB:</b> The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.	

## 14. TRANSPORT INFORMATION

<b>Rail/Road (RID/ADR)</b>	
Proper Shipper Name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Emamectin Benzoate)
Class	: 9
UN No.	: 3077
Packing Group	: III
<b>Sea (IMDG – Code)</b>	
Proper Shipper Name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Emamectin Benzoate)
Class	: 9
UN No.	: 3077
Packing Group	: III
<b>Air (IATA-DGR)</b>	
Proper Shipper Name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Emamectin Benzoate)
Class	: 9
UN No.	: 3077
Packing Group	: III

## 15. REGULATORY INFORMATION

HAZARD SYMBOL	Xn	Harmful
	N	Dangerous for the environment
Special Risks (R-Phrases)	R22	Harmful if swallowed
	R 23/25	Toxic by inhalation and if swallowed
	R 36	Irritating to eyes

**SAFETY DATA SHEET**  
**EMAMECTIN BENZOATE 5% SG**  
**(VOLEX)**

	R 48/22	Harmful danger of serious damage to health by prolonged exposure if swallowed
	R 50/53	Very toxic to aquatic organism, may cause long term adverse effects in the aquatic environment.
Safety Advice (S-Phrases)	S 2	Keep out of the reach of children
	S 13	Keep away from the food, drink and animal feeding stuffs.
	S 20/21	When using do not eat, drink or smoke.
	S 35	This material and its container must be disposed of safe way.
	S 36/37	Wear suitable protective clothing and gloves
	S 57	Use appropriate container to avoid environment contamination.
International WHO Toxicity Classification	II	Moderately hazardous.

**16. OTHER INFORMATION**

**Legal disclaimer:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.