

MARGO	Margo Biocontrols Pvt. Ltd., Tumkur, Karnataka	
	Document: Material Safety Data Sheets	Document No: QF/MBC/PROD/MSDS/002
	Title : MSDS of DELFIN® WG	Rev. : 00 Rev. Date: 02.05.2018

MATERIAL SAFETY DATA SHEET

DELFIN® WG (Biological Pesticide)

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1. **PRODUCT INFORMATION :**

Product Name : Delfin® WG
Product code : Not available
Chemical family: *Bacillus thuringiensis kurstaki*

2. **COMPOSITION/INFORMATION ON INGREDIENTS :**

COMPONENTS	CAS NO.	WT%	OSHA PEL	TLV's TWA	STEL
Bacillus Thuringiensis	68038-71-1	85	N/A	N/A	N/A
Dispersing agent		15	---	---	---

3. **HAZARDOUS IDENTIFICATION :**

EMERGENCY OVERVIEW

This product is a brown granule with a fishmeal odour, which is intended for use as a pesticide to control insects on agricultural crops. There is no specific antidote if this product is ingested. Treat symptomatically.

Central Insecticides Board signal word : Caution

4. **POTENTIAL HEALTH EFFECTS :**

Route(s) of entry : Eyes, skin, oral, inhalation.

Human Effects and Symptoms of exposure : Exposure may result in eye, skin and respiratory tract irritation.

Acute Eye contact : May be slightly irritating.

Chronic Eye contact : Chronic exposure not likely from normal use

Acute skin contact	:	May be slightly irritating. A skin sensitization (allergic) reaction may occur in sensitive individuals.
Chronic skin contact	:	Chronic exposure not likely from normal use.
Chronic ingestion	:	Chronic exposure not likely from normal use.
Acute inhalation	:	May result in respiratory tract irritation.
Chronic inhalation	:	Chronic exposure not likely from normal use.
Carcinogenicity:		
NTP	:	N/A
IARC	:	N/A
OSHA	:	N/A
Medical conditions		
Aggravated by exposure:		Individuals with allergic history or pre-existing dermatitis should take extra care when handling this product.

5. **FIRST AID MEASURES** :

If poisoning is suspected, immediately contact a physician, the nearest Hospital or the nearest Poison Control Center. Tell the person contacted the complete product name and the type and amount of exposure. Describe any symptoms and follow the advice given.

First aid for eyes	:	Immediately wash eyes with a large amount of water. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agent except on the advice of a physician.
First aid for skin	:	Wash with plenty of soap and water, including hair, and under fingernails. Do not apply any medicating agent except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.
First aid for inhalation	:	Move victim from contaminated area to fresh air. Seek medical attention, if necessary.
First aid for ingestion	:	If victim is fully conscious, immediately give large amounts of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

6. **FIRE FIGHTING MEASURES :**

NFPA Hazard classification : HEALTH HAZARD 1
FIRE HAZARD 0
REACTIVITY 0

Extinguishing media : Dry chemical, foam or carbon dioxide extinguishing media.

Unusual fire and explosion hazards : None known.

Special fire fighting procedures : Wear full protective clothing and self-breathing apparatus. Evacuate nonessential personnel from the area to prevent exposure to fire, smoke, fumes, or products of combustion. Prevent use of contaminated buildings, area and equipment until decontamination.

7. **ACCIDENTAL RELEASE MEASURES.**

Spill or leak procedures : Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering and a NIOSH-approved dust or pesticide respirator with dust prefilters. For small spills, sweep up, keeping dust to a minimum and place in a approved chemical container. Wash the spill with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in a approved manner. Flush the area with water to remove any residue. Do not allow wash water to decontaminate water supplies.

8. **HANDLING AND STORAGE :**

Storage temperature (Min. /Max.) : Not applicable.

Shelf life .. : Stable

Special sensitivity : None known

Handling and storage : Store the material in a well ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Always wash thoroughly after handling.

9. **EXPOSURE CONTROLS/PERSONAL PROTECTION:**

Eye protection requirements	: To avoid eye contact, wear safety Goggles with side shields or Chemical goggles.
Skin protection requirements	: To avoid skin contact, wear Rubber gloves, rubber boots, Long sleeved shirt, long pants, And a head covering.
Respiratory/Ventilation Requirements	: To avoid breathing dust, wear a NIOSH-approved dust or pesticide Respirator with dust prefilters.
Exposure limits	: N/A.

10. **PHYSICAL AND CHEMICAL PROPERTIES**

Physical form	: Granules
Colour	: Brown
Odour	: Fishmeal odour
Boiling point range	: Not applicable
Melting/Freezing point	: Not applicable
Flash point	: Not applicable
Solubility in water	: Not Applicable
Bulk density	: 20.00 lbs.cu.ft

11. **STABILITY AND REACTIVITY :**

Stability	: Stable
Hazardous polymerization	: Will not occur
Incompatibilities	: None known
Decomposition products	: None known

12. **TOXICOLOGICAL INFORMATION :**

Oral LD ₅₀ (Rat)	: > 5100 mg/kg body weight
Dermal LD ₅₀ (Rat)	: 5000 mg/kg body weight
Eye contact (Rabbit)	: Not available
Skin contact (Rabbit)	: Not available
Toxicity of other components	:
Surfactant	: Repeated or prolonged inhalation of dust can cause irritation of nose, throat and lungs. Exposure can result in headache, nausea, dizziness and slight irritation to eyes and skin.
Target organs:	
Active ingredients	: Not available
Inert ingredients :	
Surfactant	: Eyes, skin and respiratory tract.

13. **DISPOSAL CONSIDERATION :**

Do not reuse product packing materials and residues. Dispose the product packing materials and residues according to local state and federal health and environmental regulations.

14. **TRANSPORT INFORMATION:**

Not classified as hazardous under transport regulations.
DOT hazard class: Not applicable

15. **REGULATORY INFORMATION:**

OSHA status: N/A
TSCA status: N/A
CERCLA reportable quantity: N/A
RCRA status: N/A

16. **OTHER INFORMATION:**

N/A – Not applicable

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This product is for agricultural use only.