

# MATERIAL SAFETY DATA SHEET

PRODUCT : Fipronil 0.5% DP

**PRODUCT DESIGNATION : Insecticide** 

Section 1. Product & Company Identification				
Common Name	:	Fipronil 0.5% DP		
Grade	:	Formulation		
Active Ingredient	:	Fipronil		
Chemical Name of Active	:	(RS)-5-amino-1-[2,6-dichloro		
Ingredient (IUPAC)		(trifluoromethyl)phenyl]-4- (trifluoromethylsulfinyl)-		
		1H-pyrazole-3-carbonitrile		
Chemical Family of A. I.	:	phenylpyrazoles		
Molecular Formula of A. I.	:	$C_{12}H_4Cl_2F_6N_4OS$		
Molecular Mass of A. I.	:	437.15 g/mol		
Manufacturer & Supplier	:	M/s PERFECT SOLUTIONS.		
		Office Add: B-371, Paschim Vihar, New Delhi -		
		110063 (India)		
		Factory Add: 15/1, 15/2, 15/3 Industrial Estate,		
		Vidisha - 464001 (M.P)		
Telephone Number	:	+91 8375844625		

## Section 2. Composition / Information on Ingredients

Name of Components	Concentration% w/w
Fipronil a. i.	00.50% w/w min.
Other Ingredients	Q.S to make
Total	100.00% w/w

## Section 3. Hazards Identification

**Inhalation** : Inhalation of dust of this material can cause drying of mucous membranes of the eyes, nose and throat which may result in irritation and occasional nose bleeds.

Eye contact : Direct contact with dust may cause slight eye irritation.



**Skin contact** : Direct contact with dust may cause slight skin irritation. Ingestion : Slightly toxic if swallowed. Emergency Antidote : No specific antidote. Treat symptomatically. **Antidote:** No specific antidote. Treat symptomatically.

#### Section 4. First Aid Measures

#### Emergency and First Aid Procedure -

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15-20min. remove contact lessens, if present, after the first 5 min, then continue rinsing eye.

**If on Skin:** Take off contaminated clothing, rinse skin immediately with plenty of water for 15-20 minutes.

**If Inhaled:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

**If Swallowed:** Give a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Seek doctor for treatment advice immediately.

## **Section 5. Fire Fighting Measures**

#### Hazardous product of Combustion.

Extinguishing Media: Water spray, carbon dioxide, foam, dry agent.

**Special Fire fighting procedures:** Wear full protective equipment and self-contained breathing protection. Avoid Creating significant airborne dust. Spray unopened containers with water to keep cool. Contain fire-fighting water by bonding area with sand or earth to prevent it entering any bodies of water. Dispose of fire control extinguishing agent and spillage later in safe manner.

**Unusual fire and Explosion Hazards:** Toxic gases including carbon monoxide, carbon dioxide, oxides of nitrogen, and Smoke.

## Section 6. Accidental Release Measures

**Personal Precautions**: Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate gear for the situation.



**Environmental Precautions:** Do not flush to drain. If spilled on the ground, the affected area should be scraped and placed in an appropriate container for disposal. Prevent material from entering public sewer system or any waterway.

**Steps to be taken in case of a spill:** Obey all Federal, State or local regulations for health & safety and environmental protection when the accidental release is treated. Sweep up, place in a bag and hold for waste disposal. Wash spill site with soap and plenty of water after material pick-up is complete. Do not discharge to river, sea, lake, waterway or sewer systems directly.

#### Section 7. Handling & Storage

**Precautions in Handling:** Avoid breathing dust. Keep container tightly closed; flush container clean before discarding. Do not reuse container. Do not apply when weather conditions may cause drift. Do not allow this product to drift to non-target areas.

**Precautions in Storage:** Store in the closed, original container in a cool, secure, well-ventilated area.

## Section 8. Exposure Control, Personal Protection

**Personal Protection :** Appropriate respirator for dust. Working cloths with long sleeves and long pants.

**Protective Gloves:** Outside: Polyvinyl chloride, or Rubber. Inside: Cotton , rayon Polyethylene.

**Eye Protection:** Use safety glasses. If there is a potential to exposure for dust, wear safety goggles.

**Skin Protection:** Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

**Engineering Control:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

## Section 9. Physical and Chemical Properties

Appearance / state:PowderOdour:Weak characteristic odorMelting Point:NA



Ph	:	5-7
Corrosivity	:	Non-corrosive
Density	:	c.a 1.18g/cm3 (20° C)
Flash Point	:	Not flammable

## Section 10. Stability & Reactivity

10.1 Reactivity Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

Section 11. Toxicological Information				
Oral LD50	: rat >2000 mg/kg			
Skin Contact, Dermal LD50	: rat > 2000 mg/kg.			
Inhalation, (4 hr) LC50	: for rat $> 3.5$ mg/l.			
Eye Irritation	: Non-Irritating to eyes			
Skin Irritation	: Non- Irritating to skin			
Sensitization	: Non- Sensitizing (guinea pig)			

## Section 12. Ecological Information

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout) 0.25 mg/l

Exposure time: 96 h The value mentioned relates to the active ingredient fipronil.

**Toxicity to aquatic plants EC50 (Desmodesmus subspicatus (green algae))** 0.068 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fipronil.



**Toxicity to aquatic invertebrates** EC50 (Daphnia magna (Water flea)) 0.19 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient fipronil. LC50 (Mysidopsis bahia (mysid shrimp)) 0.14  $\mu$ g/l Exposure time: 96 h

#### Section 13. Disposal Consideration

**Waste Treatment Methods:** Contaminated absorbents, surplus product (in diluted form), etc., should be buried in approved landfill. Comply with any local legislation applying to waste disposal. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options.

**Containers:** For incinerate this material at a facility that. Refer to the product label for container disposal instructions. Do not re-use empty containers

Section 14. Transport Information							
IMDG Classification							
Shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,					
		LIQUID, N.O.S.					
Class	:	9					
Packing group	:	III					
UN number	:	3082					
Marine pollutant	:	Yes					

## Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **Further information**

WHO-classification: III (Slightly hazardous)

## Section 16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information



applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

## Safety Division : PERFECT SOLUTIONS, SAFETY DIVISION