

MATERIAL SAFETY DATA SHEET
FIPRONIL 20% SC

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance	: Fipronil 20% SC
Use of the substance	: Insecticide
Manufacturer/supplier	: Tagros Chemicals India Private Limited
Address	: "Jhaver Centre", Rajah Annamalai Building, IV Floor, 72, Marshalls Road, Egmore, Chennai-600 008, India
Emergency telephone number	: +91-44-42007400
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2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

Eyes	: Cause eye irritation, may cause redness and tearing.
Skin	: Harmful if absorbed, may cause redness, irritation and swelling.
Ingestion	: Harmful if swallowed. Danger of serious damage to health by prolonged exposure if swallowed.
Inhalation	: Harmful by inhalation. Avoid breathing sprays mist.
Environment	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	EC No.	Classification	Con. % w/w
Fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile	120068-37-3	---	T; R23/24/25-48/25 N; R50-53	20.0
Others	---	---	---	80.0

4. FIRST AID MEASURES

Contact with eyes	:	Rinse immediately with plenty of water keeping eyelids open. Seek medical advice and show the container or this material safety data sheet.
Contact with skin	:	Carefully remove contaminated clothing. Wash affected area with soap and water. Seek medical aid if required.
Ingestion	:	If swallowed do not induce vomiting; seek medical advice immediately and show this container or label. Keep the person calm and comfortable.
Inhalation	:	If inhaled, remove to fresh air and keep at rest. Obtain medical aid if required.

5. FIRE FIGHTING MEASURES

Flash point	:	Non-flammable
Extinguishing media	:	If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand
Special exposure hazards	:	Gives off irritating or toxic fumes (or gases) in a fire .
Protective equipment for fire-fighting	:	Do not breathe fumes. Wear self contained breathing apparatus.

Fire fighting guidance : Whenever Fipronil is involved in a major fire, advise the fire service to wear protective clothing and breathing apparatus. Inform the fire service and other relevant authorities that fipronil is toxic for fish, and that water should be used only to cool unaffected stock. In this way, the accumulation of polluted run-off from the site is prevented.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing as detailed in section 8.

Environmental precautions : Keep people and animals away. Prevent entry into drains, sewers and watercourses.

Methods for cleaning up : Absorb spillage on sand/earth or in a suitable inert material. Transfer collected material to heavy-duty plastic drums and keep safe for disposal.

7. HANDLING AND STORAGE

Handling : No special measures are necessary provided the product is used correctly. When using does not eat, drink or smoke.

Storage : Store in original containers. Store in areas that are cool, dry and well ventilated. Store away from seeds, fertilizers and animal feed stuff.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value	: ADI: 0.0002 mg/kg bw (JMPR 2000)
Engineering controls	: Mechanical ventilation should be used when handling this product in closed spaces.
Respiratory protection	: NIOSH approved organic vapor respirator in absence of mechanical ventilation.
Hand protection	: Wear chemical resistant PVC or nitrile gloves.
Eye protection	: Wear safety goggles with imperforated side shield and face shield.
Skin protection	: Avoid contact with skin. Wear apron, boots and full protective suit.
Environmental exposure controls	: Keep away from food, drink and animal feed stuff. This material and its container must be disposed off as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid Flowable Suspension
Color	: Off white to Light Beige
Odour	: Characteristic Moldy Odor
Molecular Weight	: 437.2
Flash point	: Non-flammable
Solubility in water	: Make suspension
PH	: pH range: 5.5 to 6.5
Vapour pressure	: 3.7×10^{-4} mPa (25°C) (Fipronil)

10. STABILITY AND REACTIVITY

Stability	: Stable for two years at ambient conditions.
Conditions to avoid	: Avoid excessive heat and flame.
Materials to avoid	: No substances known that should be avoided.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Rat LD₅₀ oral, Rats	: LD ₅₀ : >300-2000 mg/kg bw
Rat LD₅₀ dermal, Rats	: LD ₅₀ : >2000 mg/kg bw
Rat LC₅₀ inhalation, Rats	: LC ₅₀ : 1.19 mg/l 4 hr
Skin irritation	: Non-irritant to skin of rabbits
Eye irritation	: Slight-irritant to eye of rabbits.
Skin sensitization	: Non-sensitizing to skin of Guinea pigs
Long term studies	
Carcinogenicity	: Non-carcinogenic in rats
Mutagenicity	: Non-mutagenic.
Reproductive toxicity	: Not a reprotoxic in rats.
Teratogenicity toxicity	: Non-teratogenic effects in rats.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Bluegill sunfish, 96 hours	:	LC ₅₀ : 85 µg/l (Fipronil)
Rainbow trout, 96 hours	:	LC ₅₀ : 248 µg/l (Fipronil)
<i>Daphnia</i> spp., 48 hours	:	EC ₅₀ : 0.19 mg/l (Fipronil)
<i>Scenedesmus subspicatus</i>, 96 hours	:	EC ₅₀ : 0.068 mg/l (Fipronil)
Honey bee	:	Highly toxic to honeybees both by direct contact and by ingestion. However, no risk to honey bee when used as a soil or seed treatment.
Earthworm	:	Non-toxic
Mobility	:	Fipronil and its metabolites present a low risk of downward movement in soil.
Persistence and degradability	:	Fipronil readily degraded, major degrades in soil (aerobic) are sulfone and amide; (anaerobic) are sulfide and amide. Fipronil dissipates with a half-life of 1.1 to 1.5 months for bare soil and 0.4 to 0.5 months for turfed soil.

13. DISPOSAL CONSIDERATIONS

Product disposal	:	Do not empty into drains or waterways. Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.
Container disposal	:	Lightly contaminated packaging may be accepted for landfill, otherwise incineration will be required. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

UN number	: 2902
UN class	: 6.1
UN packaging group	: III
Proper Shipping Name	: PESTICIDE, LIQUID, TOXIC, N.O.S.
Additional information	: Fipronil is marine pollutant

15. REGULATORY INFORMATION

Classification	: Xn: Harmful N: Dangerous for the environment
Risk Phrases	: R20/22: Harmful by inhalation and if swallowed. R36: Irritating to the eyes. R37: Irritating to respiratory system R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed. R50/53: Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
Safety Phrases	: S1/2: Keep locked up and out of the reach of children S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28: After contact with skin, wash immediately with plenty of water S36/37: Wear suitable protective clothing and gloves S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). S60: This material and its container must be disposed off as hazardous waste.
Reference regulation	: Fipronil has been reviewed under Directive 91/414/EEC & Directive 98/8/EC.

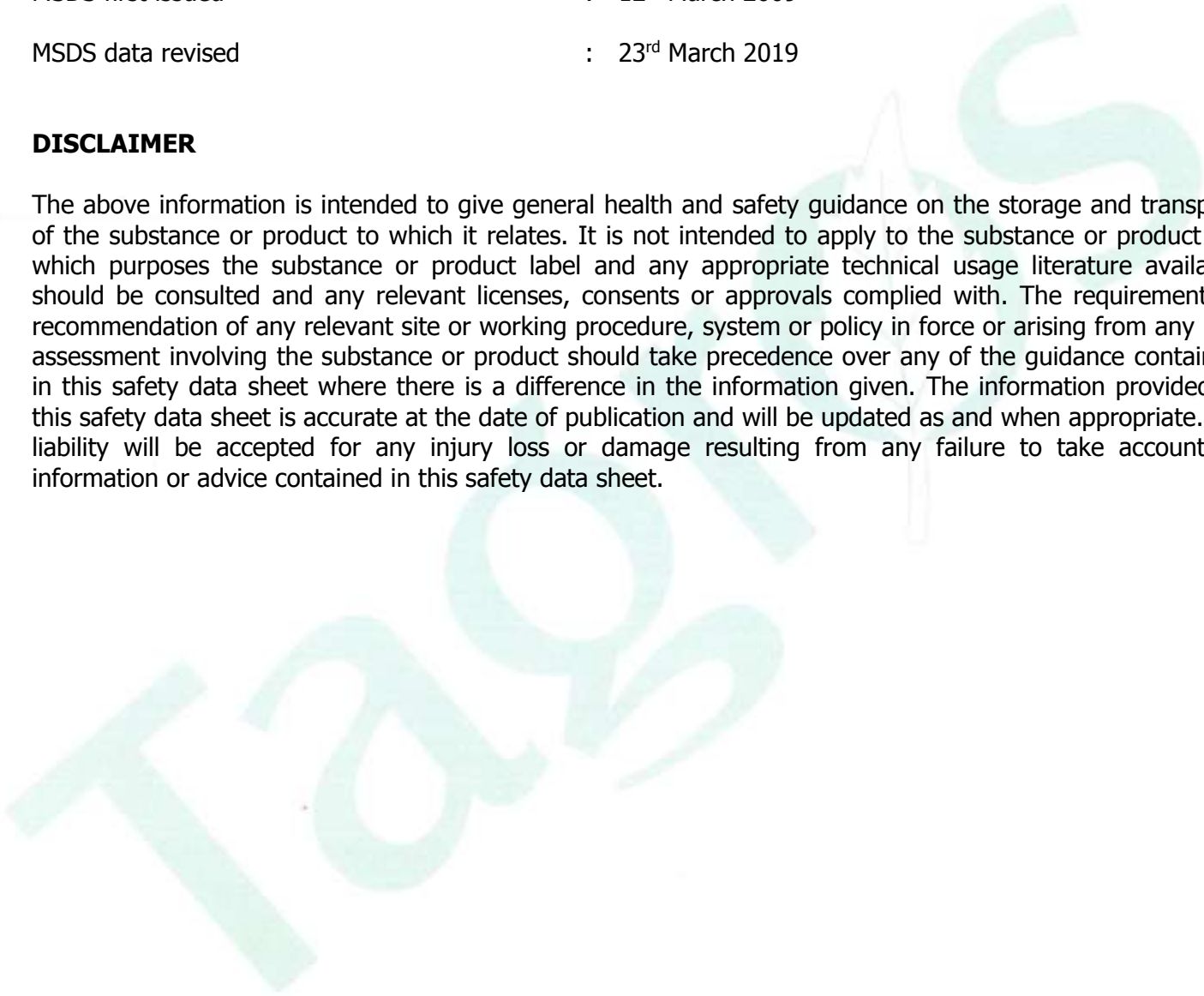
16. OTHER INFORMATION

MSDS first issued : 12th March 2009

MSDS data revised : 23rd March 2019

DISCLAIMER

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. It is not intended to apply to the substance or product for which purposes the substance or product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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