

**MATERIAL SAFETY DATA SHEET
IMIDACLOPRID 35% SC**

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Identification of the substance	:	Imidacloprid 35% SC
Use of the substance	:	Insecticide
Manufacturer/supplier	:	Tagros Chemicals India Limited
Address	:	Tagros Chemicals India Ltd. "Jhaver Centre", Rajah Annamalai Building, IV Floor, 72, Marshalls Road, Egmore, Chennai-600 008, India
Emergency telephone number	:	+91-44-42007400
Fax number	:	+91-44-28587873
E-mail	:	info@tagros.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

Eyes	:	Mild irritant to eyes.
Skin	:	May cause skin irritation.
Ingestion	:	Harmful when swallowed.
Inhalation	:	No hazard in normal use. Product is unlikely to cause any discomfort or irritation. May cause irritation to nose and throat.
Environment	:	Toxic to aquatic organisms

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	EC No.	Classification	Con. % w/v
Imidacloprid (ISO); 1-(6-chloropyridin-3-ylmethyl)-N-nitroimidazolidin-2-ylideneamine	138261-41-3	428-040-8	Xn; R22 N; R50/53	35.0
Others	---	---	---	65.0

4. FIRST AID MEASURES

Contact with eyes	: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Avoid exposing affected eyes to bright light. Seek medical advice and show the container or this material safety data sheet.
Contact with skin	: Remove contaminated clothing and wash the affected area with water and soap. Call a doctor for treatment advice.
Ingestion	: Do not induce vomiting. Do not give anything by mouth. Obtain medical attention immediately. If the person is alert, rinse mouth thoroughly with water.
Inhalation	: If vapours or mists have been inhaled, remove the source of contamination or move victim to fresh air. The patient should be kept under observation and obtain medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

- Extinguishing media** : If product is involved in a fire, use water spray, foam, dry powder, carbon dioxide or sand.
- Special exposure hazards** : Fire may produce irritating or poisonous vapours (toxic compounds of carbon, nitrogen and chlorine), mists or other products of combustion.
- Protective equipment for fire-fighting** : Do not breathe fumes. Wear full protective clothing & self-contained breathing apparatus.
- Fire fighting guidance** : Keep out of smoke. Fight fire from upwind position. Cool closed containers/tanks exposed to fire with water spray. Do not allow run-off to enter drains or water courses.
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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** : Small Spill: Sweep or vacuum up spillage and collect in suitable container for disposal.
- Large Spill: Liquid spills on floor or other impervious surfaces should be contained and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions Provided. Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

7. HANDLING AND STORAGE

Handling	: Wear chemically impervious gloves, safety glasses, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using the toilet. Remove personal protective equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Read all precautions and instructions on the label.
Storage	: Store the material in a well ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco product in the storage area. Prevent eating, drinking, chewing and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit value	: ADI: (JMPR) 0.06 mg/kg bw (2001)
Engineering controls	: Mechanical ventilation should be used when handling this product in closed spaces
Respiratory protection	: Use a NIOSH approved respirator in absence of mechanical ventilation.
Hand protection	: Wear chemical-resistant gloves such as nitrile, neoprene rubber, polyvinyl chloride (PVC).

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
Color	: White to off-white
Odour	: Slight characteristic
Molecular Weight	: 255.7 (Imidacloprid)
Relative density	: 1.15
Solubility in water	: Completely miscible
Persistent foam	: Maximum: 40 ml after 1 min.
Wet sieve test	: Maximum: 0.1% retained on a 75 μ m test sieve.

10. STABILITY AND REACTIVITY

Stability	:	Stable for a period of 2 years under normal warehouse conditions.
Conditions to avoid	:	Avoid excessive heat and flame.
Materials to avoid	:	Avoid contact with strong oxidising agents.
Incompatibility	:	Incompatible with oxidizing agents.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Rat LD ₅₀ oral, Rats	:	695.74 mg/kg bw (technical)
Rat LD ₅₀ dermal, Rats	:	>2000 mg/kg bw(technical)
Skin irritation	:	Non-irritant to skin of rabbits
Eye irritation	:	Mild-irritant to eye of rabbits
Skin sensitization	:	Non-sensitiser to skin of Guinea pigs
Long term studies		
Carcinogenicity	:	Non-carcinogenic in rat and mice
Mutagenicity	:	Non-mutagenic
Reproductive toxicity	:	Non-reprotoxic and teratogenic

12. ECOLOGICAL INFORMATION

Ecotoxicity

- Fish, golden orfe : LC₅₀ (96 h): 237 mg/l (Imidacloprid)
- Daphnia magna*** : LC₅₀ (48 h) 85 mg/l (Imidacloprid)
- Algae, ***Pseudokirchneriella subcapitata*** : EC₅₀: >100 mg/l (Imidacloprid)
- Bees : Imidacloprid is harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crop or when used as a seed treatment.
- Earthworms, ***Eisenia foetida*** : LC₅₀ : 10.7 mg/kg dry soil. (Imidacloprid)
- Birds, Japanese Quails : LD₅₀: 31 mg/kg (Imidacloprid)
- Mobility : Imidacloprid and soil metabolites are to be classified as immobile; leaching into deeper soil layers is not to be expected if Imidacloprid is used as recommended.
- Persistence and degradability : Environmental DT₅₀ c. 4 h. Besides sunlight, the microbial activity of a water/sediment system is an important factor for the degradation of Imidacloprid.

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 : Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by local authorities, by burning.
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14. TRANSPORT INFORMATION

UN number	: 2902
UN class	: 6.1
UN packaging group	: III
Proper Shipping Name	: PESTICIDE ,LIQUID , TOXIC, NOS
Additional information	: Imidacloprid designated as marine pollutant.

15. REGULATORY INFORMATION

Classification	: Xn: Harmful N: Dangerous for the environment
Risk Phrases	: R20/22: Harmful by inhalation and if swallowed. R 21: Harmful in contact with skin. R 36/37/38: Irritating to eyes, respiratory system and skin. R50/53: Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.
Safety Phrases	: S1/2: Keep locked up and out of reach children. S13: Keep away from food, drink and animal feeding stuffs. S24/25: Avoid contact with skin and eyes. S57: Use appropriate containment to avoid environmental contamination S60: This material and its container must be disposed of as hazardous waste S61: Avoid release to the environment. Refer to special instructions/safety data sheets S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Reference regulation	: Regulation (EC) No 1907/2006

16. OTHER INFORMATION

MSDS first issued : 08th April 2002
MSDS data revised : 07th February 2012

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.