

MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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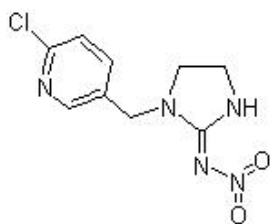
1. Chemical Product Identification

Product Name: Imidacloprid 20%SL

Molecular Formula: C₉H₁₀ClN₅O₂

Molecular Weight: 255.66 g/mol

Structural Formula:



Chemical Name: (E)-1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine

2. Composition / Information on Ingredients

| Composition | CAS No. | Content |
|-------------------|-------------|---------|
| Imidacloprid | 138261-41-3 | 20% |
| Other ingredients | -- | 80% |

3. Hazards Identification

Hazard statement:

H302: Harmful if swallowed.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301 + P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

P330: Rinse mouth.

P501: Dispose of contents/container in accordance with local regulation.

4. First Aid Measures

Skin: Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.

Eyes: First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

Inhalation: Move affected person to fresh air and keep at rest until recovered. If not breathing, give artificial respiration and get to a doctor.

Ingestion: Do not induce vomiting if the person is conscious. Give glass of water. Get to a doctor.

Notes to physician: No specific antidote if ingested. Treat symptomatically.

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.

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 attapulgate, 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: Do not apply to humans, their clothing, or bedding. Do not contaminate food or use on household tanks.

Storage: Store at normal temperatures, away from children, domestic animals, food and feed products, seed and fertilizer. Do not contaminate other stored products or the storage area by handling or storage of this product. Keep in a well-ventilated room.

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

Appearance: Light yellow liquid

pH: 5.0-7.0

Water: $\leq 0.5\%$

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 oxidizing agents.

Incompatibility: Incompatible with oxidizing agents.

11. Toxicological Information

Acute oral LD50 for rat: 131 a.i. mg/kg
Acute dermal LD50 for rat: > 5000 a.i.mg/kg
Inhalation LC50 (4 h) for rat: > 0.069 a.i.mg/L
Skin irritation: Non-irritating to skin (rabbits)
Eye irritation: Non-irritating to eyes (rabbits)
Skin sensitization: Not a skin sensitizer (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: acute LD50 for Bird is 31 a.i.mg/kg.
Effect on fish: acute 96 hour LC50 for Rainbow trout is > 83 a.i.µg/L.
Effect on aquatic invertebrates: acute 48 hour EC50 for Daphnia magna is 85 a.i.µg/L.
Effect on algae: acute 120 hour EC50 for Scenedemus subspicatus is > 10 a.i.mg/L.
Effect on honeybees: contact acute 48 hour LD50 is >0.081 a.i.µg/bee, oral acute 48 hour LD50 is 0.0037 a.i.µg/bee.
Effect on earthworms: acute 14 day LC50 is 10.7 a.i.mg/kg.

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.

14. Transport information

Class: 9 UN: 3082

15. Regulatory Information

Not applicable

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 on 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 produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.