

**Material Safety Data Sheet : IMIDACLOPRID TECHNICAL****1. Chemical Product and Company Identification**

**Product Name** : Imidacloprid Technical  
**Formula** : C<sub>9</sub>H<sub>10</sub>ClN<sub>5</sub>O<sub>2</sub>  
**Molecular Weight** : 255.7  
**Chemical Name** : 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine  
**Manufacturer** : Sumitomo Chemical India Limited  
Corporate Office : 13 / 14 Aradhana Industrial Development Corporation, Near Virwani Industrial Estate, Goregaon (East), Mumbai – 400 063  
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**Email** : [msds@sumichem.co.in](mailto:msds@sumichem.co.in)  
**URL** : <http://www.sumichem.co.in>

**2. Composition/Information on Ingredients**

Component	CAS No.	% W/W content
Imidacloprid	138261-41-3	95 minimum

**3. Hazard Identification****Emergency Overview**

**Appearance and odour** : White to off white crystal, with weak characteristic odour

**Warning Statements** : Keep out of reach of children

**Potential Health Effects**

**Likely Routes of Exposure** : Skin contact, Inhalation and Ingestion

**Eye Contact** : Unlikely to cause eye irritation

**Skin contact** : Irritation on prolonged skin contact has not been reported.

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**Ingestion** : Harmful if swallowed

**Inhalation** : Unlikely to cause adverse effect by this route

**Environmental Hazards** : The product is an active ingredient in insecticide formulations

### 4. First aid measures and Antidote

Emergency and First Aid Procedure –

- If in Eyes** : Immediately flush with plenty of clean water for 15-20 minutes. Remove contact lenses if present after 5 minutes of washing. Get medical attention
- If on Skin** : Wash with plenty of clean water and soap. Get medical attention if irritation develops
- If Inhaled** : If experiencing any distress/discomfort, immediately remove the affected person to fresh air and obtain medical advice if discomfort does not disappear
- If Swallowed** : Immediately offer drinking water to the person, if able to swallow. Get medical attention
- Note to Physician** : Treat symptomatically. May be treated as usual against effects of acids or acid fumes
- Antidote** : No specific antidote known

### 5. Fire Fighting Measures

- Hazardous product of Combustion** : Not known.
- Extinguishing Media** : Foam, Dry chemical powder, CO<sub>2</sub> type fire extinguisher or Flood with water.
- Unusual Fire and Explosion Hazards** : The product does not pose any unusual fire hazard.
- Fire Fighting Equipment** : Evacuate the area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapours and decomposition products, if any. Use self-contained breathing apparatus. Used equipments should be thoroughly decontaminated.

### 6. Accidental Release Measure

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**Personal Protection** : Observe all protection and safety precautions. Depending on the magnitude of the spill, use of eye protection, gloves and boots when cleaning up spills are recommended. For PPE see Section 8

**Steps to be taken in case of a spill** : It is recommended to have a predetermined plan / SOP for the handling of spills.

Stop the source of the spill immediately, if safe to do so. Contain the spill to prevent any further contamination of soil or water.

Keep all bystanders away. Wear full-length clothing and PVC gloves. Shovel and collect the spilled material / contaminated absorbent and place in suitable containers. Thoroughly scrub the floor or other impervious surfaces with a strong industrial detergent and rinse with water.

**Spills in water** should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal through incineration.

### 7. Handling and Storage

**Precautions in Handling** : In an industrial environment, such as while making formulation, filling or packing, it is recommended to avoid physical contact with the product and to have adequate ventilation.

Avoid spillage into the eyes, or contact with bare skin or clothing. Avoid inhaling spray mist. Wash hands, feet, face thoroughly after handling. Remove contaminated clothing immediately

**Precautions in Storage** : The product is stable under normal conditions of warehouse storage. Keep container lids tightly closed

Store in a cool, dry, well-ventilated place away from foodstuffs, animal feed under lock & key.

**Specific Use** : The product is meant / approved to be used as insecticide.

### 8. Exposure Controls/Personal Protection

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<b>Exposure Limit Values</b>	: Not known.
<b>Personal Protection</b>	: When used in a closed / automated system, personal protection equipment may not be required. When closed system is not possible in case of maintenance, repair, sampling etc, systems must be made nonhazardous before opening
<b>Respiratory Protection</b>	: The product is not likely to pose inhalation exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a dust or mist, workers should put on respiratory protection equipment with a universal filter
<b>Protective Gloves</b>	: Wear appropriate gloves
<b>Eye Protection</b>	: Wear goggles, face shield or safety glasses. It is recommended to have an eye wash fountain available in the work area.
<b>Skin Protection</b>	: Wear appropriate protective clothing to prevent direct skin contact

### 9. Physical and Chemical Properties

<b>Physical State</b>	: Solid
<b>Appearance</b>	: White to off white crystal,
<b>Odour</b>	: with weak characteristic odour
<b>Relative Density (Specific Gravity)</b>	: 1.50±0.03 g/mL.
<b>pH value</b>	: 6.81-6.84
<b>Viscosity</b>	: Not applicable.
<b>Vapour Pressure</b>	: $9 \times 10^{-7}$ mPa at 25° C
<b>Vapour Density</b>	: Not known.
<b>Melting Point / Freezing Point</b>	: $144.1 \pm 0.1^{\circ}$ C
<b>Boiling Point</b>	: Not applicable.
<b>Flash Point</b>	: Not applicable.
<b>Auto Ignition Temp</b>	: Not applicable.
<b>Flammable Limits</b>	: Non-flammable.

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**Solubility in Water** : 550 ± 16 ppm at 20° C

**10. Stability and Reactivity**

**Chemical Stability** : Product is stable under ambient conditions of storage

**Materials to Avoid** : Data not available.

**Hazardous Decomposition Product** : Refer to section no. 5

**Hazardous Polymerisation** : Not reported

**11. Toxicological Information**

**Health Hazards** : Refer to section no. 3

**Acute Toxicity** : The product is likely to be toxic. It should be treated with the usual care of handling hazardous chemicals. :

**Route(s) of Entry**

Ingestion : LD<sub>50</sub>, oral, rat: 1000 mg/kg body weight of female rat  
Skin : LD<sub>50</sub>, dermal, rat: > 2000 mg/kg body weight  
Inhalation : 4 hour LC<sub>50</sub>, rat: 5.04 mg/L air.

**12. Ecological Information**

**Acute Oral Toxicity in Birds** : In bobwhite quail 152mg/kg body weight.

**Acute Toxicity in Fish (96 hrs LC<sub>50</sub>)** : Rainbow trout: 211mg/L

**Acute Toxicity Honey bees** : Harmful to honey bees by direct contact.

**13. Disposal Considerations**

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- Waste Treatment Methods** : Keep out of Drains, Sewers, Ditches and Water ways.  
Left-over material that should not be used or chemically reprocessed and should be disposed of in a landfill approved for pesticide disposal. Other possible methods of disposal are controlled incineration with flue gas scrubbing
- Containers** : Emptied containers may retain vapour and product residue. Observe all labeled safeguards until container is cleaned or destroyed.
- Triple or pressure rinse empty containers. Pour rinse water into formulation tank. Store for collection by approved waste disposal service.
- Dispose of as non hazardous industrial waste. Do not re-use containers.
- Disposal of waste and packaging materials must always be in accordance with all applicable local laws / regulations.

### 14. Transport Information

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Hazardous under the applicable DOT, ICAO/IATA, IMO, TDG

#### IMDG Classification

- Proper Shipping Name** : Pesticide, Toxic, Solid, n.o.s. (Imidacloprid)
- Hazard class / I D No.** : 6
- Subsidiary hazard(s)** : -
- Label** : Class-6.1
- UN No.** : 2588
- Packing Group** : III
- Marine Pollutant** : Yes

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### **15. Regulatory Information**

- Contains** : Imidacloprid Technical ( CAS No. 138261-41-3)
- Regulatory Status** : The product is meant for the production of insecticide formulations which may only be used for the applications they are registered for, in accordance with an officially approved label

### **16. Other Information**

This MSDS is intended for storage and transport safety. It summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

This material should be handled by persons who are made aware of its hazardous properties and have been instructed in the required safety precautions.

This MSDS is not intended for product users who should refer to the product label for safety precautions applicable to them.

The information provided in this safety data sheet is believed to be accurate and reliable, but uses of the product may vary and situations unforeseen by Sumitomo Chemical India Limited may exist. The user has to check the validity of the information under local circumstances.