

Saudi Delta Company for Chemical Industries

Product Safety Data Sheet

1. Chemical product and company identification

1.1. Prepared Date: Jan. 2025

1.2. **Product Information**:

Trade Name: *Imidapride-200 S.L (w/v)*.

1.3. Information about manufacturer / supplier :

Saudi Delta Company for Chemical Industries Riyadh – Saudi Arabia – 3rd Industrial City

Tel. 00966-11-2654533 Fax. 00966-11-2654532

P.O. Box 355809 Riyadh 11383 Saudi Arabia

2. Information on ingrediants

2.1. Chemical properties (Component Substances).

The product is a mixture of one active ingredient, antifreezing agent, and solvent.

- Imidacloprid: 20% w/v (Systemic insecticide with translaminar activity and with contact and stomach action)
- Monoethylene glycol: 1% w/v (Antifreezing Agent)
- N-Methyl Pyrrolidone: (Solvent) up to 100% V.

2.1.1. Imidacloprid:

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

CAS No.: [138261-41-3]

Development Codes: BAY NTN 338993

Mol. wt: 255.7

Mol. Formula: C9H10 ClN5O2.

Form: Colourless crystals, with a weak characteristic odour.

M. Point: 145.3°C

Vapour Pressure: 4 x 10⁻⁷ mPa (20°C); 9 x10⁻⁷ mPa (25°C).

Kow: $logP = 0.57 (21^{\circ}C)$

Henry: 2 x 10⁻¹⁰ Pa m³ mol ⁻¹ (20°C, calc.).

S.g./ Density: 1.54(20-25°C).

Solubility: In water 0.61g/l (20°C). In dichloromethane 67, acetone 50, acetonitrile 50, ethyl acetate 6.7, ,isopropanol 2.3, toluene 0.69, DMSO,DMF >200 (all in g/l, 20 °C); in n-hexane <0.1 g/l (ambient temperature).

Stability: Stable to hydrolysis at pH 5 - 11.

2.1.2. N-Methyl Pyrrolidone:

CAS No. :00000872-4

Mol. Wt :99

Mol. Formula :C₅H₉ NO

Flash point : 92°C

Autoignition Temp: 270°C.

Flammable Limits : 1.3 - 9.5%.



Boiling Point: 202°C.

V.P : 0.29mm Hg (at 20°C)

Water solubility : Miscible

Melting point:-24.4°C.

Apperance: Clear Liquid, **S.G.**: 1.025 – 1.035 (20°C)

Percentage Volatiles: Non volatile at S.T.P **Evaoporation Rate:** 0.03 (Butyl Acetate =1)

pH of 10% Sol.: 7.2, Odour: Mild amine –Like odour

3. Hazard Identification

- 3.1 **Primary Routes of entry:** Absorption / Contact.
- 3.2. **Symptoms of inhalation:** No effects of exposure expected, if misted or at high concentrations, may cause pallor, nausea, anesthetic, or narcotic effects.
- 3.3. **Symptoms of Skin contact**: Prolonged or repeated contact cause redness, Swelling, cracking.
- 3.4. **Symptoms of eyes contact**: painful, burning or stinging of eyes and Lids watering of eys and Lids.
- 3.5. **Medical conditions aggravated by exposure**: No Data found.

4. First aid Measures

General precautionary measures suggest inducing vomiting immidiately by giving two

glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call A physician.

4.1 First Aid For Inhalation:

Remove to fresh air. If not breathing, give artificail respiration, preferably mouth-to-mouth. If Breathing is Diffecult, give oxygen. Call A physician.

4.2 First Aid For Skin Contact:

Wash skin with saop and water. Call a physician. Wash clothing before reuse.

4.3 First Aid For Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes call a physician.

5. Fire Fighting Measures

- **5.1. Flash Point :**199.00 DEGF 92.78DEG C (CG).
- 5.2. Autoignition Temp: 518.00 DEGF 270 DEGC
- **5.3. Flammable Limits:** 1.30% 9.50%
- 5.4. Fire Fighting Media: Water /Alcohol foam /Dry chemical/ Carbon dioxide.
- **5.5.Special Fire Fighting Procedures:** Firefighters should wear positive pressure, full face self-

contained breathing apparatus. Cool fire-exposed containers with water spray.

Caution: After fire is extinguished, material vapors could accumulate, travel to asource

of



igniton and flash back

- **5.6. Fire/Explosion Hazards:**Combustible liquid. Fire hazard when exposed to heat, sparks or
 - flame. Vapors are heavier than air and may travel a considerable distance to a source of igniton and flash back. Vapor-air mixtures are explosive.
- **5.7. Hazardous Decomposition products:** CO and NOx fumes emitted when heated to decomposition.

6. Accidental Release Measures

- **6.1** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. At high concentration, use with adequate ventilation.
 - Keep container and vapors from this container away from heat, sparks and flame. Keep container closed.
- **6.2. Spill /Leak clean–Up procedures:** Eliminate sources of igniton. Absorb with earth, sand or
- similar inert material and dispose of with sold waste according to federal, state and local
 - regulations. Flush spill area with a water spray.

7. Handling and Storage

7.1. Precautionary measures:

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. At high concentrations, use with adequate ventilation. Keep container and vapors from this container a way from heat, sparks and flame. Keep container closed.

7.2. Storage: Normal Warehousing.

8. Exposure controls, Personal Protections.

- 8.1. **Ventilation**: At high concentrations, use with adequate ventilation.
- 8.2. **Respiratory protection**: Niosh-Approved respirator, where TLV or PEL may be exceeded.
- 8.3. **Eye protection**: Chemical goggles.
- 8.4. **Skin protection**: Impervious gloves of natural latex or neoprene (Specifically, natural latex gloves ar -340 and style #Y-18 from glover latexing, -Anaheim, Ca; or a neoprene

glove "scorpio" #8-352 fromedmont wilson- Coshocton, OH) .

- 8.5. **Personal Hygiene**: Wash thoroughly after handling.
- 8.6. **Protective measures during repair/Maintenance of equipment**: Wash equipment thoroughly with steam or warm water until clean. Check for flammables with an 'Explosion meter' and also check the oxygen level with an oxygen meter. In all cases, follow good industrial safety practices before entering equipment.



9. Physical and chemical properties

- 9.1. Shape: Liquid.
- 9.2. Colour: Colourless to yellowish clean.
- 9.3. Odour: Odorless.
- 9.4. Product use: Agricultural Use (In secticide).
- 9.5. **Melting point:** Not applicable.
- 9.6. **Boiling Point:** Approx 202°C.
- 9.7. **Specific gravity (25°C):** 1.09
- 9.8. Vapour Pressure: Not available.
- 9.9. Viscosity (CPS): 23 (25°C)
- 9.10. Solubility in water: Miscible.
- 9.11. **Flammable Limits:** 1.3% ~ 9.5%
- 9.12. **pH of 1% (aq. sol.)** : $4 \sim 7$

10. Stability and Reactivity

- 10.1. **Stability:** Stable under normal conditions.
- 10.2 **Hazardous Decomposition:**CO and NOx fumes when heated to decomposition of solvent.
- 10.3. **Dangerous product of decomposition:** Will not occur.
- 10.4. Incompatible materials: Strong oxidizing or reducing Agents.

11. Toxicological Information (For Technical grade)

MAMMALIAN TOXICOLOGY:

- 11.1. Oral: Acute oral LD₅₀ for male and female rats c. 450mg/kg
- 11.2. **Skin and eye:** Acute percutaneous LD_{50} (24 h) for rats >5000mg/kg. Non-irritating to eyes and skin (rabbits). Not a skin sensitiser.
- 11.3. **Inhalation** LC₅₀: (4h) For rats >5323mg/m³ dust, 69mg/m³ air (aerosol)..
- 11.4. **NOEL** (2y) for male rats 100, female rats 300, mice 330mg/kg diet; (52 w) for dogs 500mg/kg diet..
- 11.5. **ADI** 0.057 mg/kg b. w.
- 11.6. Other: Not mutagenic or teratogenic
- 11.6. Toxicity class WHO (a.i.) II; EPA (formulation) II.

12. Ecological Data (Technical grade)

- 12.1. **Birds:** Acute oral LD₅₀ for Japanese quail 31, bobwhite quail 152mg/kg. Dietary LC₅₀ (5d) for bobwhite quail 2225, mallard ducks > 5000mg/kg.
- 12.2. **Fish:** LC₅₀ (96h) for golden orfe 237, rainbow trout 211mg/l..
- 12.3. **Daphnia:** LC₅₀ (48h) 85 mg/l.
- 12.4. Algae ErC₅₀ for pseudokirchneriella subcapitata >100mg/l



12.5. Bees: Harmful to honeybees by direct contact, but no problems expected when not sprayed

into flowering crop or when used as a seed treatmetn.

12.6. Worms LC₅₀ for Eisenia foetida 10.7mg/kg dry soil.

13. Disposal Considerations

13.1. Pesticides Disposal

Pesticide wastes are toxic . Improper disposal of excess pesticide , spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of use according to label insturctions contact.

Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

- Container disposal 13.2.
- 13.2.1. Metal containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by local authorities. Do not cut or weld metal containers.
- 13.2.2. Plastic containers: Triple rinse (or equivalent). Then offer for ercycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by authorities, by burning. If burned, stay out of smoke.
- 13.2.3. Returnable / Refillable Sealed Containers: Don't rins container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase

14. Transport Information		
GGVE/GGVS: 6.1/III		RID/ADR: 6.1
IMDG-Code: 6.1/ III	EMS :	MFAG :
IATA/ICAO: 6.1 III	UN:	PAX : CAO :
15 Regulatory Information		

Toxicity Classifications: Moderately Hazardous 15.1.

15.2. Warning Symbol X 15.3. R-Phrase

R36/38: Irritating to eyes and skin. : Harmful if swallowed R22

15.4 S-Phrase

> S41 : In case of fire and /or explosion don't breath fumes .

S22 : Don't breath dust.

S24/25: Avoide contact with skin and eyes.

: If swallowed, seek medical advice immediately and show this S46

container

16. Other Information

The producer warrantees the quality of this product in the original closed packagin, and of its conformity with authority agreement during 2 years.