

Saudi Delta Company for Chemical Industries

Product Safety Data Sheet

1. Chemical product and company identification

1.1. **Prepared Date:** June. 13. 2024

1.2. **Production Information:**

Trade Name: Neogen-200 SC

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 amixture of one active ingredient, Co-Solvent, Wetting & Dispersing agents and water .

- **Chlorantranilliprole** : 20% a.i (w/v).
- **Propylene glycol** : 7%
- **Wetting Dispersing agents**:5% (w/v).
- **Coconut Oil** : 10% (w/v)
- **Thickening Agent** : 0.2% (w/v)
- **Benzyl Alcohol** : 1% (w/v)
- **Water** : Up to 100% (v).

Common name: Chlorantranilliprole

CAS No.: [50000-45-7]

Mol. wt.: 483.2

M.f.: $C_{18}H_{14}BrCl_2N_5O_2$

Form : Fine,Crystalline,off-white powder.

M.p.: 208-210 °C

V.p.: 6.3×10^{-9} mPa (20°C)

Kow logP = 2.76×10^{-9}

Henry : 3.2 Pa m³ mol⁻¹ (calc.)

S.g./Bulk density : 1.5189 (20-25°C)

Solubility :

Soluble in acetone(3.4) , acetonitril(0.71), methanol(1.71), Dichlorometane(2.48), DMF(124), ethyl acetate(1.14), hexane(0.001), octanol(0.386), o-xylene(0.162), (g/l , 20-25 °C).

Water Solubility:(g/l , 20-25 °C) 1.0 (ph 4-9)

Stability Aqueous hydrolysis : Stable (pH 4-7) , 10 d (pH 9)

Aqueous Photolytic Stability : (DT50) 0.37 d (pH 7)

Thermal Stability : Decopm. 330 °C

2.1.2. Propylene glycol

- **CAS No.** : 57-55-6.μ
- **Mol. wt.** : 76.1
- **Chemical Formula:** C₃H₈O₂. **Appearance:** Clear, colourless oily Liquid
- **Odor** : Odourless.
- **Solubility** : in water complete **S.G.:** 1.04 (25°C) °C
- **Boiling Point:** 185°C **Melting Point:** - 60°C
- **Vapour Density (Air =1):** 2.6 **Vapour Pressure (mm/Hg):** 2.6 at 26°C
- **Viscosity:** 46 CPS at 25°C .

2.1.3. Surfactants:

Anionic Surfactants (lignosulfonate) 50-100%

Anionic surfactants 10-25%

Form: Powder **pH:** 8 (5% H₂O)

M.P: > 100°C **F.P:** Not applicable

Colour: brown **V.P:** < 1mb (20°C).

Water Solubility: Completely soluble.

Flammability (Solid, gas): No date available

3. Hazard Identification

3.1. Classification of the substance or mixture According to UN GHS criteria Aquatic Acute 1 Aquatic Chronic 1

3.2. Hazard Statement: H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

3.3. Precautionary Statements (Response): P391 Collect spillage. Other hazards According to UN GHS criteria See section 12 - Results of PBT and vPvB assessment.

3.4. Signal Word: Warning

4. First aid Measures

Remove contaminated clothing.

4.1. If inhaled: Keep patient calm, remove to fresh air.

4.2. If skin contact: Wash thoroughly with soap and water.

4.3. If contact with eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open.

4.4. If ingestion: Rinse mouth and then drink plenty of water.

4.5. Most important symptoms and effects, both acute and delayed Symptoms: No significant reaction of the human body to the product known.

4.6. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment

5. Fire Fighting Measures

5.1. Extinguishing media Suitable extinguishing media: water spray, dry powder, foam, carbon dioxide

5.2. Special hazards arising from the substance or mixture carbon monoxide, Carbon dioxide, nitrogen oxides The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters Special protective equipment: Wear self-contained breathing apparatus and chemical-protective clothing. Further information.

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures: Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). For large amounts: Dike spillage. Pump off product. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

7.1. Precautions for safe handling: No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

7.2. Protection against fire and explosion: No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

7.3. Conditions for safe storage, including any incompatibilities :Segregate from foods and animal feeds.

7.4. Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

7.5. Storage stability: Storage duration: 24 Months

8. Exposure controls, Personal Protections.

- 8.1. **Personal protection:** Don't breathe dusts, after treatment, wash and change clothes prior anything else like eating, drinking, or smoking.
- 8.2. **Respiratory protection:** Wear a suitable anti dust mask.
- 8.3. **Skin protection:** Wear suitable protective clothing mask.
- 8.4. **Eye protection:** Wear. Eye / face protection.
- 8.5. **Ingestion:** Don't eat, drink or smoke during application.
- 8.6. **Industrial hygiene:** Avoid splashes (Suitable protective clothing ...etc.)

9. Physical and chemical properties

- | | |
|---------------------------|--------------------------------------|
| 9.1. Shape | : Liquid as a suspension concentrate |
| 9.2. Colour | : White |
| 9.3. Odour | : Typical odor |
| 9.4. Product Use | : Agricultural Use .(Insecticide) |
| 9.5. Melting point | : N.A |
| 9.6. Boiling Point | : N.A |
| 9.7. Specific Gravity | : 1.09 |
| 9.8. Vapour Pressure | : Not available |
| 9.9. Viscosity (CPS) 25°C | :530 |
| 9.10. Solubility in water | : Forms a white emulsion |
| 9.11. % Persistent foam | : Max. 20 ml after 1 min. |
| 9.12. PH | : 6-8 |

10. Stability and Reactivity

- 10.1. **Reactivity** :No hazardous reactions if stored and handled as prescribed/indicated.
- 10.2. **Chemical stability** : The product is stable if stored and handled as prescribed/indicated.
- 10.3 **Possibility of hazardous reactions:** No hazardous reactions if stored and handled as prescribed/indicated.
- 10.4. **Conditions to avoid** : See MSDS section 7 - Handling and storage.
- 10.5. **Incompatible materials Substances to avoid:** strong acids, strong bases, strong oxidizing agents
- 10.6. **Hazardous decomposition products** : No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

11.1. Assessment of acute toxicity: Virtually nontoxic after a single ingestion.

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

11.2. Experimental/calculated data: LD50 rat (oral): > 5.000 mg/kg LD50 rat (dermal): > 5.000 mg/kg

11.3. Information on: Chlorantraniliprole Experimental/calculated data: rat (by inhalation): > 5,1 mg/l 4 h

11.4. Irritation Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin. Experimental/calculated data: Skin corrosion/irritation rabbit: non-irritant Serious eye damage/irritation rabbit: non-irritant

11.5. Respiratory/Skin sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data: mouse: Skin sensitizing effects were not observed in animal studies.

Germ cell mutagenicity Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect. Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

11.6. Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration to animals.

Aspiration hazard No aspiration hazard expected. The product has not been tested. The statement has been derived from the properties of the individual components.

12. Ecological Data

Toxicity

12.1. Assessment of aquatic toxicity: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

12.2. Toxicity to fish: LC50 (96 h) > 9,9 mg/l, *Lepomis macrochirus*

12.3. Aquatic invertebrates: EC50 (48 h) 0,035 mg/l,

12.4. Daphnia magna Aquatic plants: EC50 (120 h) > 20 mg/l, *Pseudokirchneriella subcapitata*

12.5. Persistence and degradability Assessment biodegradation and elimination (H2O): The product has not been tested. The statement has been derived from the properties of the individual components.

12.6. Bioaccumulative potential Assessment bioaccumulation potential: The product has not been tested. The statement has been derived from the properties of the individual components.

12.7. Information on: Chlorantraniliprole Assessment bioaccumulation potential: Does not accumulate in organisms.

12.8. Mobility in soil Assessment transport between environmental compartments: Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Chlorantraniliprole Assessment transport between environmental compartments: Adsorption in soil: low mobility in soil

12.9. Other adverse effects ;The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

12.10 Additional information Other ecotoxicological advice: Do not discharge product into the environment without control.

13. Disposal Considerations

13.1. Disposal: Residue and rinse water must be poured into a 30cm hole, 50m away from any water and covered with earth.

After use, empty and clean apparatus on site, prevent the product entering natural water, ditches or sewers.

13.2. Disposal of packaging: After use, empty packing must be punched and destroyed or incinerated.

14. Transport Information

14.1. ADR UN number UN3082 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRAZOLE-DERIVATIVE)

14.2. Transport hazard class(es): 9, EHSM Packing group: III

14.3. Environmental hazards: yes

14.4. Special precautions for user: Tunnel code: E

14.5. UN number UN3082

14.6. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRAZOLE-DERIVATIVE)

14.7. Transport hazard class(es): 9,

14.8. EHSM Packing group: III

14.9. Environmental hazards: yes

14.10. Special precautions for user: None known

15. Regulatory Information

15.1. **Symbol (s)** : Warning

15.2. **R-Phrase** :

R20/21/22 : Harmful by inhalation, in contact with skin and if swallowed

R36/38 : Irritating to eyes and skin.

15.3 **S-Phrase** :

S2 : Keep out of reach of children.

S13 : Keep away from food, drink, and animal feeding stuffs .

S25 : Avoid contact with eyes.

S22 : Don't breathe dust.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 : Wear suitable gloves and eye/ face protection.

16. Other Information

6.1.1. **Recommended uses and restrictions:** The producer warrants the quality of this product in the original closed packaging, and of its conformity with authority agreement for minimum 2 years.