



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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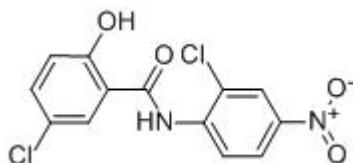
1. Chemical Product Identification

Product Name: Niclosamide 98% TC

Molecular Formula: C₁₃H₈Cl₂N₂O₄

Molecular Weight: 327.12 g/mol

Structural Formula:



Chemical Name: 2,5-dichloro-4'-nitrosalicylanilide

Form: Powder

Colour: Light yellow

CAS No.: 50-65-7

2. Composition / Information On Ingredients

Composition	Chemical name	Content (% w/w)
Active ingredient	Niclosamide	98%
Other ingredient	-----	2%

3. Hazards Identification

May be harmful if ingested, inhaled, or absorbed through the skin. May cause irritation. To the best of our knowledge, the toxicological properties of this compound have not been fully



investigated. Exercise appropriate precautions to prevent opportunities for inhalation, and to prevent direct contact with skin and eyes. All uncharacterized chemicals should be treated as suspected toxins.

4. First Aid Measures

Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless directed to do so by a physician or poison control center. Have a person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

5. Fire-Fighting Measures

Condition of flammability: Not flammable or combustible.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let



product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling And Storage

Handling: Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required.

Storage: Store in a cool, dry well ventilated place away from sources of heat and incompatible substances. Keep container tightly closed when not in use.

8. Exposure Controls/personal protection

Engineering Controls: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Eye/Face Protection: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate equipment should be selected for the particular use intended for this material. Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Body Protection: Applicators and other handlers must wear long-sleeved shirts, long pants, chemical resistant, waterproof gloves, and shoes plus socks during mixing, loading, applying and clean-up and repair activities. Where overhead exposure is possible, chemical resistant headgear should be worn.

9. Physical And Chemical Properties

Appearance: Light yellow powder

Loss on drying: $\leq 0.5\%$

Melting Point: 224°C

Partition Coefficient: $\log P = 4.56$ (at pH 7, 20°C)

Vapour pressure: 8×10^{-8} mPa (at 25°C)

Solubility: 5.0mg/l in water (20°C).



10. Stability And Reactivity

Chemical Stability: Stable under recommended storage conditions.

Conditions to Avoid: No data available.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides, nitrogen oxides, hydrogen chloride gas.

11. Toxicological Information

Acute oral LD₅₀ for rats: >5000 a.i.mg/kg

Acute dermal LD₅₀ for rats: 2000 a.i.mg/kg

Skin irritation: Slightly irritating to rabbits

Eye irritation: Irritating to rabbits

Skin Sensitization: Non-sensitive (Guinea Pig)

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD₅₀ for Bobwhite quail is >2000 mg/kg.

Effect on fish: Acute LC₅₀ (96 h) for Rainbow trout is 1.83 mg/l.

Effects on aquatic invertebrates: Acute EC₅₀ (48 h) for Daphnia magna is 1.3 mg/l.

Effects on algae: Acute EC₅₀ (72 h) for Pseudokirchneriella subcapitata is 1.1 mg/l.

Effects on bees: Contact acute (48 h) LD₅₀ is >200 µg/bee, Oral acute (48 h) LD₅₀ is >71 µg/bee.

Effects on earthworms: Acute 14 day LC₅₀ is >1000 mg/kg.

13. Disposal Considerations

Disposal Methods: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

14. Transport Information

Not applicable



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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.