

MATERIAL SAFETY DATA SHEET OF

Niclosamide ethanolamine salt 97% TC

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd

Street address: No. 1611, North Sichuan Road, Hongkou, Shanghai R.P. China

Tel: + 86 21 63065878

Fax: + 86 21 63065878

Product name: Niclosamide ethanolamine salt 97% TC

2. COMPOSITION/INFORMATION ON INGREDIENTS

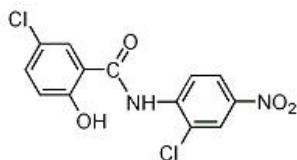
Formulation Type: Technical material (TC)

Chemical Abstracts name: 5-chloro-N-(2-chloro-4-nitrophenyl)-2-hydroxybenzamide

Molecular Formula: C₁₃H₈Cl₂N₂O₄

Molecular Weight: 327.1

Structural Formula:



Other ingredients determined not to be hazardous

INGRIDIENT	CAS NO	PROPORTION
Niclosamide (in the form of ethanolamine salt)	1420-04-8	97%
others	Not available	Balance

3. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute aquatic toxicity (Category 1), H400

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word	Warning
Hazard statement(s) H400	Very toxic to aquatic life.
Precautionary statement(s)P273	Avoid release to the environment.
Supplemental Hazard Statements	none

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENT RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

For personal protection see section 8.

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 and materials for containment and 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**Precautions for safe handling**

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510): Combustible Solids

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the

concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow crystals

Solubility in water: 0.2 mg/L (20°C)

Explosive properties: No data available

Oxidizing properties: No data available

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Oral Acute oral LD₅₀ for rats >5000 mg tech./kg.

Skin and eye Acute percutaneous LD₅₀ for rats >2000 mg/kg (as WP70).

Inhalation LC₅₀ (4 × 1 h) 3630-8224 mg/m³ air (as WP70).

Skin corrosion/irritation

No data available (Niclosamide)

Serious eye damage/eye irritation

No data available (Niclosamide)

Respiratory or skin sensitization

No data available (Niclosamide)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

12. ECOLOGICAL INFORMATION

For Niclosamide TC

Birds LD₅₀ for mallard ducks >500 mg/kg (FAO Specifications).

Fish LC₅₀ (96 h) for golden orfe 0.1 mg/l.

Daphnia LC₅₀ (48 h) 0.2 mg/l.

Algae ErC₅₀ for Scenedesmus subspicatus 5 mg/l.

Bees No significant mortality effects.

13. DISPOSAL CONSIDERATION

Wastes resulting from the use of this product may be disposed on site by use according to the label or at an approved waste disposal facility. State and local authorities should be contacted to determine the current regulations.

The container may be disposed in a sanitary landfill or by incineration after completely emptying the bag into the application equipment. State and local authorities should be contacted to determine the current regulations.

14. TRANSPORT INFORMATION

ADR/RID

UN number: 3077

Classification: 9

Packing group: III

UN proper shipping name: ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS.
(Niclosamide)

IMDG

UN number: 3077

Classification: 9

Packing group: III

UN proper shipping name: ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS.
(Niclosamide)

IATA

UN number: 3077

Classification: 9

Packing group: III

UN proper shipping name: ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS.
(Niclosamide)

15. REGULATORY INFORMATION

Follow local, international laws and regulations.

16. OTHER INFORMATION

This MSDS 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 the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

-- END OF MSDS --