



MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

Product Name: Bentazone 480 g/L SL
Manufacturer: Sinochem Ningbo Ltd.
Active Ingredient: Bentazone
IUPAC Name: 3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one
2,2-dioxide
CAS RN.: 25057-89-0
Chemical Class: Benzothiadiazinone
Use Class: Herbicide
Formulation: Water soluble concentrate

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Proportion (w/v)
Bentazone	25057-89-0	480 g/L
Other ingredients	/	Fill to 1L

Ingredients not precisely identified are proprietary or non-hazardous.

SECTION 3. HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.
Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

If ingested in sufficient quantities, causes nausea, vomiting, diarrhea, and tremors.



Inhalation hazard of vapors is not anticipated at normal temperatures. Excessive inhalation of mist may cause irritation of mucous membranes.

SECTION 4. FIRST AID MEASURES

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre.

Swallowed:

If poisoning occurs contact a doctor or Poisons Information Centre. If swallowed DO NOT induce vomiting. Give a glass of water. Begin artificial respiration if victim is not breathing. Use mouth to nose rather than mouth to mouth.

Eyes:

Will irritate eyes. Avoid contact with eyes. If product gets in eyes wash it out immediately with water.

Skin:

Will irritate the skin. Avoid contact with skin. If skin contact occurs remove contaminated clothing and wash affected areas thoroughly with soap and water.

Inhaled:

Move person to fresh air and keep at rest until recovered.

Note to physician:

No specific antidote is available. If poisoning is suspected apply symptomatic therapy.

SECTION 5. FIRE FIGHTING MEASURES

Autoignition Temperature: Not Available

Flammability: This product is NON-FLAMMABLE and non-explosive.

Unusual Fire, Explosion and Reactivity Hazards: None known.



In Case of Fire: Use dry chemical, foam, or CO₂ as extinguishing media. Wear full protective and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

SECTION 6. ACCIDENTAL RELEASE MEASURES

In case of spillage it is important to take all steps necessary to:

Avoid eye and skin contact.

Avoid contamination of waterways.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear goggles, half face-piece respirator with combined dust and vapour cartridge, full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimize further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Dispose of the absorbed material will depend upon the extent of the spill.
For quantities up to 50L of product bury in a secure landfill site.
For quantities greater than 50L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

SECTION 7. HANDLING AND STORAGE

Handling:

KEEP OUT OF REACH OF CHILDREN. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.



Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

Store in tightly sealed original containers in a dry secure place away from fertilizers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorized persons and animals.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION
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Engineering Controls:

No special requirements. Product is used outdoors.

Personal Protection:

Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing spray wear elbow-length PVC gloves and face shield or goggles. If product gets in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves and face shield or goggles and contaminated clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Brown liquid with sweet odor
Solubility:	Soluble in water.
Specific Gravity:	1.16-1.22
Boiling Point/Range (°C):	100 (water)
pH:	7.5-9
Viscosity:	N/A
Evaporation Rate:	N/A

SECTION 10. STABILITY AND REACTIVITY



Stability:	Stable in normal use and storage conditions.
Conditions to Avoid:	Temperature extremes.
Hazardous Polymerization:	NOT possible.
Incompatible materials:	None known.

Hazardous Decomposition Products:

Can decompose at high temperatures forming toxic gases.

SECTION 11. TOXICOLOGICAL INFORMATION
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Acuter Toxicity/Irritation Studies for the End Product:

Acute Oral Toxicity	Rat: LD50: >2000 mg/kg.
Acute Dermal Toxicity	Rat: LD50: >5000 mg/kg.
Acute Inhalation Toxicity	Rat: LC50 (4 h): > 6.25 mg/L air.
Eye Irritation	Rabbit: Mildly irritating to eyes.
Skin Irritation	Rabbit: Mildly irritating to skin.
Sensitization	Guinea pig: Not a skin sensitizer.

SECTION 12. ECOLOGICAL INFORMATION

Ecological Information (for Bentazone technical)

Birds: Acute oral LD50 for bobwhite quail 1140 mg/kg. Dietary LC50 for bobwhite quail and mallard ducks >5000 ppm.

Fish: LC50 (96 h) for rainbow trout and bluegill sunfish >100 mg/l.

Daphnia: LC50 (48 h) 125 mg/l.

Algae: EC50 (72 h) for green algae (*Ankistrodesmus*) 47.3 mg/l.

Bees: Not toxic to bees; LD50 (oral) >100 µg/bee.

Worms: EC50 (14 d) >1000 mg/kg soil.

Other beneficial spp.: Harmless to the ground beetles *Aleochara*, *Bembidion* and *Poecilus*, and to the aphid predator *Chrysopa*.

SECTION 13. DISPOSAL CONSIDERATIONS
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Dispose Method: Disposal must be in accordance with local regulations. Dispose of container in an approved waste facility.

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. In no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

SECTION 14. TRANSPORT INFORMATION
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Road and Rail Transport

Not classified as a Dangerous Good under NZS 5433:1999 Transport of Dangerous Goods on Land.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

SECTION 15. REGULATORY INFORMATION

Hazard symbol:

Xn – Harmful

Xi – Irritant

N – dangerous for the environment



Risk phrases:

R22 Harmful if swallowed.

R36 Irritating to eyes.

R43 May cause sensitisation by skin contact.

R52/53. Harmful to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Safety phrases:

S2 Keep out of the reach of children.

S24 Avoid contact with skin.

S36/37 Wear suitable protective clothing and gloves.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Classification: Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

Subclasses: Subclass 6.3 Category B - Substances that are mildly irritating to the skin.

Subclass 6.4 Category A - Substances that are irritating to the eye.

Subclass 6.5 Category B - Substances that are contact sensitisers.

Subclass 9.1 Category D - Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action.

SECTION 16. OTHER INFORMATION

Revised Date: August 15, 2012

MSDS Number: SN366/48%SL

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.