



## MATERIAL SAFETY DATA SHEET

### BARITON 150SL (GLUFOSINATE-AMMONIUM 150g/L)

#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

**Product name:** BARITON 150g/L SL  
**Common name:** Glufosinate-ammonium  
**Company:** NINGBO HUILI IMPORT& EXPORT CO., LTD  
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#### 2. HAZARDS IDENTIFICATION

**Emergency Overview:** Warning! Harmful if swallowed or absorbed through skin. Causes eye irritation. May cause skin irritation. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist.

**Exposure routes:** Skin Absorption, Ingestion, Inhalation, Eye contact

**Immediate Effects:**

Eye: Causes eye irritation. Do not get in eyes.

Skin: Harmful or fatal if absorbed through the skin. May cause skin irritation. Do not get on skin or clothing.

Ingestion: Harmful if swallowed. Do not take internally.

Inhalation: Avoid breathing spray mist.

**Chronic or Delayed Long-Term:**

This product or its components may have target organ effects. This product or its components may have long term (chronic) health effects.

**Potential Environmental Effect:**

Toxic to aquatic organisms. This product may cause adverse effects on non-target plants.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL	CAS No.	Content (w/v)
Glufosinate-ammonium	77182-82-2	150
Sodium coceth-30 sulfate	68891-38-3	100
1-Methoxy-2-propanol	107-98-2	100
Water	7732-18-5	Up to 1L

#### 4. FIRST AID MEASURES

##### **Inhalation**

If symptoms persist, call a physician. Keep patient warm and at rest. Move to fresh air.

##### **Skin contact**

Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

##### **Eye contact**

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

##### **Ingestion**

Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

##### **Notes to Physician**

##### **Symptoms**

gastrointestinal discomfort, hyperthermia, dyspnoea, tachycardia, spasm, daze, Symptoms may be delayed.

##### **Hazards**

Ingestion may cause liver damage. Dangerous amounts can be absorbed through the skin. More severe effects if alcohol is consumed. Risk of bronchopneumonia in case of prolonged exposure. Poisoning affects the central nervous system.

##### **Treatment**

Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

#### 5. FIRE FIGHTING MEASURES

**Lower Flammability Limit:** no data available

**Upper Flammability Limit:** no data available

**Suitable extinguishing media:** Water spray, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

**Unsuitable extinguishing media:** High volume water jet

##### **Fire Fighting Instructions:**

Keep out of smoke. Fight fire from upwind position. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Do not allow run-off from fire fighting to enter drains or water courses.

Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with the spilled material or contaminated surfaces. Extinguish or remove any sources of ignition. When dealing with spills do not eat, drink or smoke, and wear protective



clothing and equipment. Keep people and animals away.

**Environmental precautions:** Prevent spilled material from entering drains or watercourses. Warn the local water authority if water-courses become contaminated.

**Methods for containment and cleaning up:** Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment with bleach or hydrated lime. Deal with all spillages immediately.

## 7. HANDLING AND STORAGE

### Handling

Hygiene measures:

When using, do not eat, drink or smoke.

Handle in accordance with good industrial hygiene and safety practice.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove soiled clothing immediately and clean thoroughly before using again.

### Storage

Requirements for storage areas and containers:

Keep out of the reach of children.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Keep away from direct sunlight.

Protect from freezing.

Advice on common storage:

Keep away from food, drink and animal feedingstuffs.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	CAS No.	Control parameters	Update	Basis
1-Methoxy-2-propanol	107-98-2	375mg/m <sup>3</sup> /100ppm (TWA)	05 2003	EU ELV
1-Methoxy-2-propanol	107-98-2	568mg/m <sup>3</sup> /150ppm (STEL)	05 2003	EU ELV

**Biological limit values:** none

### Personal protective equipment - End user

**General advice:** Eye wash facility and safety shower should be available.

**Respiratory protection:** Use respiratory protection for organic vapors. AS/NZS 1715/1716 approved respirator

**Hand protection:** Elbow-length PVC or nitrile gloves



**Eye protection:** Face-shield or goggles

**Skin and body protection:** Cotton overall buttoned to the neck and wrist. Washable hat.

### Engineering Controls

#### Advice on safe handling

Provide for appropriate exhaust ventilation and dust collection at machinery.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Yellow to tan liquid

**Odor:** Mildly pungent

**pH:** 6.7 (1% solution)

**Boiling point:** Not available

**Flash point:** 57°C

**Boiling point:** 99°C

**Density:** 1.112

**Solubility:** Soluble in water

**Explosivity:** Not explosive

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions.

**Conditions to avoid:** Heat, flames and sparks.

**Materials to avoid:** Strong oxidizing agents, Acids, Bases, Alkali metals

**Hazardous Decomposition Products:** Thermal decomposition can lead to release of: Ammonia, Oxides of carbon, Nitrogen oxides (NO<sub>x</sub>), Oxides of phosphorus, Sulphur oxides

## 11. TOXICOLOGICAL INFORMATION

**Acute Oral Toxicity LD<sub>50</sub> (rat):** 2000mg/kg bw

**Acute Inhalation Toxicity LC<sub>50</sub> (rat), 4h:** >2mg/L air

**Acute Dermal Toxicity LD<sub>50</sub> (rat):** 593mg/kg bw

**Skin Irritation:** Slight irritant (rabbit)

**Eye Irritation:** Slight irritant (rabbit)

**Sensitization:** Not a sensitizer (guinea pig)

**Repeated dose toxicity:** The technical material caused neuropathological changes in animal studies, well-tolerated in rats and mice, but less so in dog subchronic studies.

**Mutagenicity:** Glufosinate-ammonium was not mutagenic or genotoxic in a series of in vitro and in vivo tests.

**Carcinogenicity:** Not carcinogenic in rats or mice.

**Reproduction toxicity:** Implantation loss occurred in a rat multigeneration study. There were no effects



on male fertility.

**Developmental toxicity:** Caused developmental toxicity, an increased incidence of post-implantation losses, only at dose levels toxic to the dams.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

**Toxicity to fish:** LC<sub>50</sub> (Oncorhynchus mykiss (rainbow trout)) 13.4mg/L, 96 h

**Toxicity to aquatic invertebrates:** EC<sub>50</sub> (Water flea (Daphnia magna)) 17.8mg/L, 48 h

**Toxicity to aquatic plants:** EC<sub>50</sub> (Desmodosmus subspicatus) 71.3mg/L, 72 h

**Toxicity to other organisms:** Toxicity to bacteria: EC<sub>50</sub> (Activated sludge)>1000mg/L, 3h

## 13. DISPOSAL CONSIDERATIONS

### General Disposal Guidance

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Dispose of contents/container in accordance with local regulation.

### Container Disposal

Do not re-use empty containers. Follow advice on product label and/or leaflet.

## 14. TRANSPORT INFORMATION

### DOT

Possible Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (Glufosinate-ammonium solution)

Hazard Label: 6.1

UN No.: 2903

Packing Group: III

### IMDG

Possible Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (Glufosinate-ammonium solution)

Hazard Label: 6.1

UN No.: 2903

Packing Group: III

### IATA

Possible Shipping Name: Pesticide, Liquid, Toxic, N.O.S. (Glufosinate-ammonium solution)

Hazard Label: 6.1

UN No.: 2903

Packing Group: III



## 15. REGULATORY INFORMATION

### EU Classification

**Hazard Symbol:** T-toxic

### Warning phrases

#### R Phrases:

R60-May impair fertility

R63-Possible risk of harm to the unborn child

R21/22-Harmful in contact with skin and if swallowed

R48/22-Harmful: dangerous of serious to health by prolonged exposure if swallowed

R41-Risk of serious damage to eyes

### Safety Phrases

#### S Phrases

S45-In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

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

S36/37/39-Wear suitable protective clothing, gloves and eye/face protection

S53-Avoid exposure - obtain special instructions before use

## 16. OTHER INFORMATION

**Note:** The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.

-----The End-----

-----NINGBO HUILI IMPORT & EXPORT CO., LTD -----