

# Material Safety Data Sheet

## Section 1 Chemicals and Company Identification

Chemical Name: 2-Bromo-2-nitro-1,3-propanediol

CAS No.:52-51-7

Company name: JINING GREEN MOUNTAIN CHEMICAL CO.,LTD.

Address: Jining, Shandong Province, China

For emergency or additional info. +86-537-227 5079

## Section 2 Hazards Identification

### Classification

GHS risk Category:

Acute toxicity, oral category 4

Acute toxicity, dermal category 4

Skin corrosion/irritation category 2

Severe eye damage/eye irritation category 1

Specific target organ toxicity, single exposure; Respiratory tract irritation category 3

Hazardous to the aquatic environment -acute hazard category 1

### Pictogram:



**Signal: Danger**

### **Hazard statements**

H302 Harmful if swallowed

H312 Harmful in contact with skin

H315 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation

H400 Very toxic to aquatic life

### **Precautionary statements -Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

### **Precautionary statements -Response:**

P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor/if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

### **Precautionary Statements - Storage:**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

### **Precautionary Statements - Disposal:**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## **Section 3 Composition/Information on Ingredients**

Chemical name	CAS No.	Component content
2-Bromo-2-nitro-1,3-propanediol	52-51-7	not less than 99.0%
Water	7732-18-5	not more than 1.0%

## **Section 4 First Aid Measures**

**Skin contact:** Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice.

**Eye contact:** separate eyelid, flush with flowing water or normal saline. Seek medical attention immediately.

**Ingestion:** Gargle, do not induce vomiting. Seek medical attention immediately.

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

Advice to protect the rescuer: Move the patient to a safe location. Consult your doctor. Show this chemical safety specification to the on-site doctor.

## **Section 5 Fire Fighting Measures**

### **Fire extinguishing agent:**

Use water spray, dry powder, foam or carbon dioxide extinguishing agent to extinguish the fire.

Avoid the use of direct running water, which may cause splashing of flammable liquids and spread the fire.

**Special risk:** no data available.

### **Fire-fighting Precautions and Protective measures:**

Fire fighters shall wear respirators and full - body fire suits to put out the fire upwind. Remove the container from the fire as much as possible into an open area.

Evacuate immediately if containers in the fire are discolored or emit sound from the safety relief device.

Isolate the scene of the accident and keep out irrelevant personnel. Collect and treat fire water to prevent environmental pollution.

## Section 6 Accidental Release Measure

### Personal precautions

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Eliminate all ignition sources.

### 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.

## Section 7 Handling and Storage

### Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

### Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## Section 8 Exposure Controls/Personal Protection

**Engineering Controls:** Provide safe shower and eye washing facilities. Mechanical exhaust required. Emergency evacuation routes and necessary evacuation areas shall be set up.

**Respiratory protection:** When the concentration in the air exceeds the limit, use a full-face supplied air respirator.

**Eye protection:** Goggles or Safety glasses with side-shields

**Hand Protection:** Wear impervious chemical resistant gloves.

**Body protection:** Protective work clothing.

## Section 9 Physical and Chemical Properties

**Appearance and appearance:** White or beige crystalline powder

Odour: No data available

**Chemical Formula:** C<sub>3</sub> H<sub>6</sub> Br N O<sub>4</sub>

**PH value:** 4~7 (1% aqua solution)

Melting point/freezing point (°C) : No data available

Boiling point, initial boiling point and boiling range (°C) : No data available

Spontaneous combustion temperature (°C) : No data available

Flash point (°C) : No data available

Decomposition temperature (°C) : No data available

Evaporation rate [butyl acetate in 1] : no data available  
Saturation vapor pressure (kPa) : No data available  
Flammability (solid, gas) : no data available  
Relative density (water in 1) : No data available  
Vapor density (air in 1) : no data available  
Odor threshold (mg/m<sup>3</sup>) : No data available  
N-octyl alcohol/water partition coefficient (L/G P) : no data available  
Solubility: Soluble in water  
Viscosity: no data available

## Section 10 Stability and Reactivity

Reactivity: No information available

**Stability:** Stable under the condition recommended.

Possibility of hazardous reactions: No data available.

**Conditions to avoid:** Excess heat. Ignition sources. Avoid dust formation, moisture, etc.

**Incompatible substances:** Strong oxidizing agents, Strong bases, Strong reducing agents.

Dangerous decomposition products: No data available.

## Section 11 Toxicological Information

### Acute toxicity:

Bronopol: LD<sub>50</sub>(rat, Oral) 307 mg/kg;

LC<sub>50</sub>(rat, Inhalation, 6h) > 5000 ppmV;

LD<sub>50</sub>(rat, Dermal) 1600 mg/kg

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity – single exposure: No data available

Specific target organ toxicity – repeated exposure: No data available

Aspiration hazard: No data available

## Section 12 Ecological Information

### Ecotoxicity:

Acute toxicity test of fish: No data available

Daphnia acute activity inhibition test: No data available

Algal growth inhibition test: No data available

Toxicity to microorganisms: No data available

**Persistence and degradation:** no data available.

**Bioaccumulation or bioaccumulation:** no data available.

**Migration in soils:** no data available.

## Section 13 Disposal Considerations

**Waste chemicals:** Recycle whenever possible. If it cannot be recycled, incineration is recommended for disposal. This product shall not be disposed of by means of drainage.

**Contaminated packaging:** Return the container to the manufacturer or dispose of it in accordance with national and local regulations.

**Attention to waste:** Before disposal of waste should refer to the relevant national and local regulations.

## Section 14 Transport Information

**UN Number:** 3241

**UN proper shipping name:** 2-BROMO-2-NITROPROPANE-1,3-DIOL

**Classification of transportation hazards:** 4.1

**Packaging categories:** III

## Section 15 Regulatory Information

Listed in the regulations below:

CHINA - China Inventory of Existing Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

ENCS - Japan Existing and New Chemical Substances

EINECS - European Inventory of Existing Commercial Chemical Substances

## Section 16 Additional Information

The above information is considered correct but does not claim to be complete and should be used only as a guide. The information in this document is based on our current knowledge and applies to the appropriate safety precautions for the product. It does not represent any guarantee of the performance of the product.

The Company and its subsidiaries shall not be liable for any damage caused by handling or contact with the above products. Please refer to the back of the invoice or packing list for additional terms of sale.