



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards)

SECTION 1: Identification

1.1 Product Identifiers

- Product Name: Bromine
- Product Number: BR2-20260227
- Brand: SIGALD
- CAS-No.: 7726-95-6
- Synonyms: Dibromine

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
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- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Uses

- Identified Uses: Organic synthesis (flame retardants, pharmaceuticals), water disinfection, chemical intermediate, photography, metallurgy.
- Uses Advised Against: Unauthorized use; any use without proper safety equipment and training.

SECTION 2: Hazards Identification

2.1 GHS Classification: Acute toxicity (inhalation, Category 1); Skin corrosion (Category 1A); Eye damage (Category 1); Oxidizing liquid (Category 1); Aquatic toxicity (Category 1)
2.2 GHS Label Elements

- Hazard Pictogram: GHS06 (Skull and crossbones), GHS05 (Corrosion), GHS03 (Oxidizer), GHS09 (Environment)
- Signal Word: Danger
- Hazard Statements: H330 (Fatal if inhaled), H314 (Causes severe skin burns and eye damage), H270 (May cause or intensify fire; oxidizer), H400 (Very toxic to aquatic life)
- Precautionary Statements: P260 (Do not breathe gas/vapors/spray), P280 (Wear protective gloves/protective clothing/eye protection/face protection), P304+P340 (If inhaled: Remove victim to fresh air and keep at rest), P310 (Immediately call a poison center or doctor), P305+P351+P338 (If in eyes: Rinse cautiously with water)

SECTION 3: Composition

- Substance: Pure Substance
- Formula: Br₂
- Molecular Weight: 159.81 g/mol



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- Concentration: $\geq 99.5\%$ (Br₂)

SECTION 4: First Aid Measures

- Inhaled: Immediately remove to fresh air. Administer oxygen if breathing is difficult. Keep victim calm. Immediately call a doctor or poison center.
- Skin Contact: Remove contaminated clothing, rinse skin thoroughly with plenty of running water for 15-20 minutes. Apply calcium gluconate gel if available. Consult a doctor.
- Eye Contact: Hold eyes open, rinse thoroughly with large amounts of running water for 15-20 minutes. Immediately call a doctor.
- Swallowed: Do not induce vomiting. Rinse mouth with water. Immediately call a poison center or doctor.

SECTION 5: Firefighting Measures

- Suitable Extinguishing Media: Water spray (mist), carbon dioxide (CO₂), dry powder.
- Special Hazards: Strong oxidizer; supports combustion of organic materials. Releases toxic bromine vapor when heated.
- Firefighter Protection: Wear full protective equipment and self-contained breathing apparatus. Cool containers with water spray from a safe distance.

SECTION 6: Accidental Release Measures

- Personal Precautions: Evacuate area immediately. Wear self-contained breathing apparatus, chemical protective suit, gloves, eye/face protection.
- Environmental Precautions: Prevent runoff into waterways and sewers.
- Cleanup Methods: Absorb with inert material (dry sand, vermiculite) saturated with sodium thiosulfate solution. Transfer to sealed containers for disposal.

SECTION 7: Handling and Storage

- Handling: Use only in well-ventilated, corrosion-resistant, explosion-proof areas. Use glass or Teflon equipment. Avoid contact with reducing agents, organic materials, ammonia.
- Storage: Store in cool, dry, well-ventilated warehouse. Use corrosion-resistant containers (glass, HDPE). Keep away from heat, sunlight, oxidizing agents, organic materials. Storage temperature $\leq 25^{\circ}\text{C}$.
- Shelf Life: 12 months (unopened, under specified storage conditions).

SECTION 8: Exposure Controls/Personal Protection

- PPE: Self-contained breathing apparatus (SCBA), chemical-resistant suit (neoprene), nitrile gloves, chemical splash goggles, face shield.
- Engineering Controls: Closed system, gas detection systems, emergency shutdown systems, good ventilation.
- Exposure Limits: TWA (8h): 0.1 ppm (OSHA); STEL (15min): 0.3 ppm (OSHA).

SECTION 9: Physical and Chemical Properties

- Physical State: Liquid
- Color: Reddish-brown



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- Odor: Pungent, irritating (detectable at 0.05 ppm)
- Melting Point: -7.2°C
- Boiling Point: 59°C
- Solubility: Slightly soluble in water (35 g/L at 20°C); soluble in organic solvents.
- Density: 3.12 g/cm³ (25°C)
- Vapor Pressure: 23.3 kPa (20°C)
- Oxidizing Properties: Strong oxidizer.

SECTION 10: Stability and Reactivity

- Stable under normal conditions. Incompatible with reducing agents, organic materials, ammonia, metals, alkali metals.

SECTION 11: Toxicological Information

- Inhalation LC₅₀ (Rat, 1h): 1430 ppm
- Skin Corrosion: Severe corrosion (may cause burns and blisters).
- Eye Damage: Severe eye damage (may cause blindness).

SECTION 12: Ecological Information

- Aquatic Toxicity: Very toxic to fish (LC₅₀ < 0.1 mg/L, 96h) and aquatic organisms.
- Biodegradability: Not biodegradable.

SECTION 13: Disposal Considerations

- Dispose in accordance with local, national, and international regulations. Neutralize with sodium thiosulfate or sodium hydroxide solution before disposal.

SECTION 14: Transport Information

- UN Number: UN1744
- Transport Hazard Class: 8 (Corrosive substances) + 5.1 (Oxidizing substances)
- Packaging Group: I
- Marine Pollutant: Yes

SECTION 15: Regulatory Information

- Complies with GHS, REACH, TSCA, IMDG Code, IATA-DGR regulations.
- Classified as a hazardous chemical under Chinese Hazardous Chemical Safety Management Regulation.

SECTION 16: Other Information

- Revision Date: 27 FEB 2026