

# MATERIAL SAFETY DATA SHEET

24HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Nickel bromide hydrate

**CAS#:** 13462-88-9

**FORMULA:** NiBr<sub>2</sub>.xH<sub>2</sub>O

**SYNONYM:** Nickel dibromide hydrate, Nickelous bromide hydrate

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## SECTION 2 Composition and Information on Ingredients

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| INGREDIENT:    | CAS#       | %   | ACGIH (TWA)                   | OSHA (PEL)                  |
|----------------|------------|-----|-------------------------------|-----------------------------|
| Title Compound | 13462-88-9 | 100 | 0.1 mg/m <sup>3</sup> (as Ni) | 1 mg/m <sup>3</sup> (as Ni) |

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** Ingestion of nickel salts may cause intestinal disorders, convulsions, and asphyxia. Bromide exposure may cause central nervous system effects and skin rashes.

**PRIMARY ROUTES OF EXPOSURE:** Contact with skin and eyes. Inhalation of dust.

**EYE CONTACT:** May be a mild irritant to the eyes.

**SKIN CONTACT:** May cause slight to mild irritation of the skin. Prolonged contact with nickel salts may lead to dermatitis.

**INHALATION:** Dust may cause irritation to the respiratory tract; symptoms may include coughing and shortness of breath.

**INGESTION:** Ingestion of nickel salts may lead to dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, and convulsions.

**CHRONIC HEALTH EFFECTS:** Prolonged exposure to nickel compounds may cause cancer. Prolonged exposure to bromides may cause skin rashes (bromaderma) and central nervous system depression, including, memory loss, irritability, and headache.

**ACUTE HEALTH EFFECTS:** Nickel salts may be irritating to skin, eyes, gastrointestinal, and respiratory tract. Bromides may cause skin rash, blurred vision, drowsiness, irritability, dizziness, mania, and coma.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.  
**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

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## **SECTION 5            Firefighting Measures**

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**FLASH POINT:** not applicable

**AUTO IGNITION TEMPERATURE:** none

**EXPLOSION LIMITS:** none

**EXTINGUISHING MEDIUM:** None. Material is non-flammable.

**SPECIAL FIREFIGHTING PROCEDURES:** No special fire fighting procedures required.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** none

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** No unusual fire or explosion hazards.

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## **SECTION 6            Accidental Release Measures**

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**SPILL AND LEAK PROCEDURES:** To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.

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## **SECTION 7            Handling and Storage**

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**HANDLING AND STORAGE:** Store material in a tightly sealed container .

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## **SECTION 8            Exposure Controls and Personal Protection**

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical-resistant.

**VENTILATION:** If possible, handle the material in an efficient fume hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

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## **SECTION 9            Physical and Chemical Properties**

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**COLOR AND FORM:** yellow to green xtl.

**MOLECULAR WEIGHT:** 218.51

**MELTING POINT (DEG. C.):** none

**BOILING POINT:** no data

**VAPOR PRESSURE:** not applicable

**SPECIFIC GRAVITY:** no data

**SOLUBILITY IN WATER:** 199g/100cc (O°C)

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## SECTION 10 Stability and Reactivity

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**STABILITY:** air and moisture stable  
**HAZARDOUS POLYMERIZATION:** no hazardous polymerization  
**CONDITIONS TO AVOID:** none  
**INCOMPATIBILITY:** active metals and chlorine  
**DECOMPOSITION PRODUCTS:** water, metal bromide

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## SECTION 11 Toxicological Information

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**RTECS DATA:** No information available in the RTECS files  
**MUTAGENIC EFFECTS:** no data  
**TETRATOGENIC EFFECTS:** no data  
**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

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## SECTION 12 Ecological Information

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**ECOLOGICAL INFORMATION:** No information available

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## SECTION 13 Disposal Considerations

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## SECTION 14 Transportation Information

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Toxic solid, inorganic, n.o.s., Class 6.1, UN 3288, PG III

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## SECTION 15 Regulatory Information

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**TSCA:** Listed in the TSCA inventory  
**SARA (TITLE 313):** Title compound: see category code N495 for reporting.

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## SECTION 16 Other Information

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