

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (3N) 99.9% Cobalt Bromide Hydrate

**Product Code:** CO-BR-03-C.XHYD

**CAS Number:** 85017-77-2

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity Category 4

Acute dermal toxicity Category 4

Acute Inhalation Toxicity - Dusts and Mists Category 4

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word: Warning



Hazard Statements

H335 - May cause respiratory irritation

H351 - Suspected of causing cancer

H319 - Causes serious eye irritation

H315 - Causes skin irritation

H410 - Very toxic to aquatic life with long lasting effects

H302 - Harmful if swallowed

Precautionary Statements

P281 - Use personal protective equipment as required

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P273 - Avoid release to the environment

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

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

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component / CAS-No / Weight %

Cobalt(II) bromide hydrate / 85017-77-2 / 100

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## SECTION 4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation

Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

Ingestion

Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects

No information available.

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## SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. Unsuitable

Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Non-combustible. Do not allow run-off from fire-fighting to enter drains or water courses. Hazardous

Combustion Products

Hydrogen halides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or

equivalent) and full protective gear.

NFPA

Health

2

Flammability

Instability

1

Physical hazards

N/A

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required.

Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

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## **SECTION 7. HANDLING AND STORAGE**

Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

Storage

Keep in a dry, cool and well-ventilated place. Refer product specification and/or pro

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Solid  
Appearance Reddish violet  
Odor No information available  
Odor Threshold No information available  
pH No information available  
Melting Point/Range No data available  
Boiling Point/Range No information available  
Flash Point No information available  
Evaporation Rate Not applicable  
Flammability (solid,gas) No information available  
Flammability or explosive limits  
Upper No data available  
Lower No data available  
Vapor Pressure No information available  
Vapor Density Not applicable  
Specific Gravity No information available  
Solubility No information available  
Partition coefficient; n-octanol/water No data available  
Autoignition Temperature No information available  
Decomposition Temperature No information available  
Viscosity Not applicable  
Molecular Formula  $\text{Br}_2 \text{Co} \cdot x \text{H}_2 \text{O}$   
Molecular Weight 218.75

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## SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available  
Stability Stable. Hygroscopic.  
Conditions to Avoid Incompatible products. Exposure to moist air or water.  
Incompatible Materials Strong oxidizing agents, Metals  
Hazardous Decomposition Products Hydrogen halides  
Hazardous Polymerization Hazardous polymerization does not occur.  
Hazardous Reactions None under normal processing

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## SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity  
Product Information  
Oral LD50 Category 4. ATE = 300 - 2000 mg/kg. Dermal LD50 Category 4. ATE = 1000 - 2000 mg/kg.  
Mist LC50 Category 4. ATE = 1 - 5 mg/l. Component Information  
Toxicologically Synergistic  
Products  
No information available  
Delayed and immediate effects as well as chronic effects from short and long-term exposure  
Irritation Irritating to eyes, respiratory system and skin  
Sensitization No information available

Mutagenic Effects No information available  
Reproductive Effects No information available. Developmental Effects No information available.  
Teratogenicity No information available. STOT - single exposure Respiratory system  
STOT - repeated exposure None known  
Aspiration hazard No information available  
Symptoms / effects, both acute and delayed  
No information available  
Endocrine Disruptor Information No information available  
Other Adverse Effects The toxicological properties have not been fully investigated.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.  
Persistence and Degradability Soluble in water  
Persistence is unlikely based on information available.  
Bioaccumulation/ Accumulation No information available.  
Mobility Will likely be mobile in the environment due to its water solubility.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal Methods  
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT  
UN-No UN3077  
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. Hazard Class 9  
Packing Group III  
TDG  
UN-No UN3077  
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. Hazard Class 9  
Packing Group III  
IATA  
UN-No UN3077  
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.\* Hazard Class 9  
Packing Group III  
IMDG/IMO  
UN-No UN3077  
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. Hazard Class 9  
Packing Group III

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## SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals. Other International Regulations

Mexico - Grade No information available.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.