



Material Safety Data Sheet

Cobalt(II) bromide hydrate

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Cobalt(II) bromide hydrate  
**Catalog Numbers:** 31854-0000, 31854-1000  
**Synonyms:**  
**Company Identification:** Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium  
**Company Identification: (USA)** Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  
**For information in the US, call:** 800-ACROS-01  
**For information in Europe, call:** +32 14 57 52 11  
**Emergency Number, Europe:** +32 14 57 52 99  
**Emergency Number US:** 201-796-7100  
**CHEMTREC Phone Number, US:** 800-424-9300  
**CHEMTREC Phone Number, Europe:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
85017-77-2	Cobalt(II) bromide hydrate		unlisted

**Hazard Symbols:** XN N



**Risk Phrases:** 22 36/37/38 40 50/53

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

*Harmful if swallowed. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

### Potential Health Effects

**Eye:** Causes eye irritation.  
**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.  
**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract.  
**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled.  
**Chronic:**

## Section 4 - First Aid Measures

<b>Eyes:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Get medical aid. Wash mouth out with water.
<b>Inhalation:</b>	Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.
<b>Extinguishing Media:</b>	Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

### Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

### Section 7 - Handling and Storage

<b>Handling:</b>	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
<b>Storage:</b>	Store in a cool, dry place. Store in a tightly closed container.

### Section 8 - Exposure Controls, Personal Protection

#### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Exposure Limits

CAS# 85017-77-2:

United Kingdom, WEL - TWA: ( cobalt compounds): 0.1 mg/m<sup>3</sup> TWA (as Co) United Kingdom, WEL - STEL: ( cobalt compounds): 0.3 mg/m<sup>3</sup> STEL (as Co)

Japan: ( cobalt compounds): 0.05 mg/m<sup>3</sup> OEL (as Co)

Malaysia: ( cobalt, inorganic compounds): 0.02 mg/m<sup>3</sup> TWA (as Co)

Russia: ( cobalt, inorganic compounds): 0.01 mg/m<sup>3</sup> TWA

(aerosol)

Spain: ( cobalt, inorganic compounds): 0.02 mg/m<sup>3</sup> VLA-ED  
(as Co)

### Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** 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.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystals

**Color:** violet

**Odor:** Not available

**pH:** Not available

**Vapor Pressure:** Not available

**Viscosity:** Not available

**Boiling Point:** Not available

**Freezing/Melting Point:** Not available

**Autoignition Temperature:** Not available

**Flash Point:** Not available

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**Decomposition Temperature:** Not available

**Solubility in water:** Soluble

**Specific Gravity/Density:**

**Molecular Formula:** Br<sub>2</sub>Co.xH<sub>2</sub>O

**Molecular Weight:** 218.75

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable. Hygroscopic: absorbs moisture or water from the air.

**Conditions to Avoid:** Incompatible materials, exposure to moist air or water.

**Incompatibilities with Other Materials** Strong oxidizing agents, oxidizing agents, alkali metals.

**Hazardous Decomposition Products** Carbon monoxide, carbon dioxide, hydrogen bromide.

**Hazardous Polymerization** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:** CAS# 85017-77-2: None listed

**LD50/LC50:** RTECS: Not available. Other: Oral, rat: LD50=406 mg/kg

**Carcinogenicity:** Cobalt(II) bromide hydrate - IARC: Group 2B carcinogen (\*\*)

undefined \*\*).

**Other:** The toxicological properties have not been fully investigated.

### Section 12 - Ecological Information

**Other:** Do not empty into drains.

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b>Hazard Class:</b>	9	9	9
<b>UN Number:</b>	3077	3077	3077
<b>Packing Group:</b>	III	III	III

### Section 15 - Regulatory Information

#### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 40 Limited evidence of a carcinogenic effect.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 85017-77-2: Not available

Canada

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**US Federal**

TSCA

CAS# 85017-77-2 is not listed on the TSCA Inventory. It is for research and development use only.

### **Section 16 - Other Information**

**MSDS Creation Date:** 6/25/1997

**Revision #1 Date** 10/03/2006

**Revisions were made in Sections:** 2, 3, 5, 6, 8, 9, 10, 12, 14

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