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 Pharmaceuticaal 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

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<th>CAS#</th>
<th>Chemical Name: Cobalt(II) bromide hydrate</th>
<th>%</th>
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Hazard Symbols: X 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
**Eyes:**
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**
Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:**
Get medical aid. Wash mouth out with water.

**Inhalation:**
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**
Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:**
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.

**Extinguishing Media:**
Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

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**Section 6 - Accidental Release Measures**

**General Information:**
Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**
Vacuum or sweep up material and place into a suitable disposal container. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:**
Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:**
Store in a cool, dry place. Store in a tightly closed container.

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**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/m³ TWA (as Co)
- United Kingdom, WEL - STEL: (cobalt compounds): 0.3 mg/m³ STEL (as Co)

- Japan: (cobalt compounds): 0.05 mg/m³ OEL (as Co)
- Malaysia: (cobalt, inorganic compounds): 0.02 mg/m³ TWA (as Co)

- Russia: (cobalt, inorganic compounds): 0.01 mg/m³ TWA
Spain: (cobalt, inorganic compounds): 0.02 mg/m3 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: Br2Co.xH2O

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 (**
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**

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**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

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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