Section 1 - Chemical Product and Company Identification

MSDS Name: Cobalt(II) sulfate hydrate
Catalog Numbers: 37960-0000, 37960-0100, 37960-0500

Synonyms:

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaalaaan 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

<table>
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<th>CAS#</th>
<th>Chemical Name: Cobalt(II) sulfate hydrate</th>
<th>%</th>
<th>EINECS#</th>
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</table>

Hazard Symbols: T N

Risk Phrases: 49 22 42/43 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. May cause sensitization by inhalation and skin contact. May cause cancer by inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May be harmful if absorbed through the skin. May cause sensitization by skin contact.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.

Inhalation: May cause respiratory tract irritation. May be harmful if inhaled. May cause respiratory sensitization.
## Section 4 - First Aid Measures

### Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

### Skin:
Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

### Ingestion:
Get medical aid immediately. Wash mouth out with water.

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

### Notes to Physician:

## 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. Dangerous fire hazard in the form of dust when exposed to heat or flame.

### Extinguishing Media:
Use water spray, dry chemical, carbon dioxide, or chemical foam.

## 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. Avoid generating dusty conditions. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

### Handling:
Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

### Storage:
Store in a cool, dry place. Store in a tightly closed container. Store under nitrogen.

## Section 8 - Exposure Controls, Personal Protection

### Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits
CAS# 60459-08-7:

### 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:
Powder

### Color:
red

### 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:** Not available  
**Specific Gravity/Density:**  
**Molecular Formula:** CoO₄S·xH₂O  
**Molecular Weight:** 155

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, exposure to moist air or water.  
**Incompatibilities with Other Materials**  
**Hazardous Decomposition Products** Carbon monoxide, carbon dioxide, cobalt/cobalt oxides.  
**Hazardous Polymerization** Will not occur.

### Section 11 - Toxicological Information

**RTECS#:** CAS# 60459-08-7: None listed  
**LD50/LC50:** RTECS: Not available. Other: Oral, rat: LD50 = 424 mg/kg (anhydrous CoSO₄)  
**Carcinogenicity:** Cobalt(II) sulfate hydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
**Other:** See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

Not available

### Section 13 - Disposal Considerations

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

### Section 14 - Transport Information

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Severe Marine Pollutant

### Section 15 - Regulatory Information

**European/International Regulations**  
European Labeling in Accordance with EC Directives
Hazard Symbols: T N
Risk Phrases:
   R 49 May cause cancer by inhalation.
   R 22 Harmful if swallowed.
   R 42/43 May cause sensitization by inhalation and skin contact.
   R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases:
   S 53 Avoid exposure - obtain special instructions before use.
   S 22 Do not breathe dust.
   S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
   S 60 This material and its container must be disposed of as hazardous waste.
WGK (Water Danger/Protection)
   CAS# 60459-08-7: Not available
Canada
US Federal
   TSCA
   CAS# 60459-08-7 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information

**MSDS Creation Date:** 10/20/2004
**Revision #0 Date** Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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