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(716) 226-6177

MSDS No. CC 360
Effective Date December 7, 1998

CC 360

RTECS No. QU7355500 Toxicity data: Orl-rat LD50 691 mg/kg. As cobalt metal, dust]
or fume: TWA: 0.02 mg/m³ (ACGIH 1992-93); OSHA PEL 0.1 mg/m³ (Co)

INHALATION: May cause upper respiratory tract irritation. **EYES:** May cause irritation or acid burns. **SKIN:** Prolonged or repeated exposure causes irritation and may result in an allergic skin reaction or acid burns. **INGESTION:** Harmful if swallowed. May cause burns of the mouth, throat and stomach. Excessive inhalation and/or ingestion of cobalt salts may affect the kidneys, lungs and thyroid.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **SKIN:** Wash with soap and water. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and call physician. Never give anything by mouth to an unconscious person.

Stability	Unstable		Conditions to Avoid	Moisture, excessive temperature and heat.
	Stable	X		

Easily oxidized materials.

Thermal decomposition or burning may produce oxides of nitrogen.

Conditions to Avoid
<p>1. Overexposure to Sunlight: Prolonged exposure to UV radiation can lead to skin damage, including sunburn, premature aging, and an increased risk of skin cancer.</p> <p>2. Excessive Heat: High temperatures can cause dehydration, heat exhaustion, and heatstroke, particularly in outdoor environments.</p> <p>3. Dehydration: Inadequate fluid intake can lead to dehydration, which can impair cognitive function and physical performance.</p> <p>4. Overexertion: Engaging in strenuous physical activity without proper conditioning or rest can lead to fatigue, muscle strain, and injury.</p> <p>5. Improper Nutrition: Consuming a diet high in processed foods, sugar, and unhealthy fats can lead to weight gain, poor health, and decreased energy levels.</p> <p>6. Lack of Sleep: Chronic sleep deprivation can lead to impaired judgment, decreased alertness, and an increased risk of accidents.</p> <p>7. Stress: Chronic stress can lead to a variety of health problems, including high blood pressure, heart disease, and depression.</p> <p>8. Substance Use: The use of alcohol, tobacco, and recreational drugs can have serious negative effects on physical and mental health.</p> <p>9. Isolation: Lack of social support and isolation can lead to feelings of loneliness, depression, and decreased overall well-being.</p> <p>10. Ignoring Medical Advice: Failing to follow a doctor's recommendations for treatment or lifestyle changes can lead to worsening of a condition and potential complications.</p>

May Occur	Will Not Occur	Not applicable.
	X	

Steps to be taken in case material is released or spilled

Sweep up and place in a suitable container for proper disposal.

Discharge, treatment, or disposal may be subject to Federal, State or Local laws.
These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in a chemical landfill or contract a licensed chemical waste disposal service.

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail, work in a ventilation hood or wear a NIOSH/MSHA-approved dust mask.
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Local Exhaust	Recommended.	Special	No.
Mechanical (General)	Recommended.	Other	No.

Rubber.	Eye Protection	Chemical safety glasses.
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Safety glasses, smock, apron, vented hood, proper gloves, and eye wash station.

Precautions to be Taken in Handling & Storing

Store in a cool, dry place away from combustible materials. Wash thoroughly after handling. Remove and wash contaminated clothing.

Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with eyes, skin and clothing. Deliquescent material.
Avoid generating dust. Use with adequate ventilation.
Contact with other material may cause fire.


For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 6	Date	12/7/98	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I	NAME	24 HOUR EMERGENCY ASSISTANCE
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Product	COBALT NITRATE, 6-HYDRATE
Chemical Synonyms	Cobaltous Nitrate, Hexahydrate
Formula	$\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
Unit Size	up to 2.5 Kg
C.A.S. No.	10026-22-9



NFPA
HAZARD RATING

LEAST SLIGHT MODERATE

0 1 2

CHEMTREC
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Day 716-226-6177

Health	2
Fire	0
Reactivity	3

HMIS*

HIGH EXTREME

3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Cobalt Nitrate, Hexahydrate	100%	See Section V.

DANGER! STRONG OXIDIZER! MAY BE FATAL IF SWALLOWED.

HARMFUL IF INHALED. CAUSES SKIN AND EYE IRRITATION.

SECTION III PHYSICAL DATA

Melting Point (°F)	55°C (131°F)	Specific Gravity (H ₂ O = 1)	1.88 (25°C)
Boiling Point (°F)	Not applicable.	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	Not applicable.	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	Not applicable.		
Solubility in Water	Soluble.		
Appearance & Odor	Red, deliquescent crystals; slight nitric acid odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-combustible (NA).	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 140)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products. Strong oxidizing agent; dangerous fire risk in contact with organic materials.

D.O.T.	NITRATES, INORGANIC, N.O.S. , (COBALT NITRATE), 5.1, UN 1477, PG II
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Approved by U.S. Department of Labor "essentially similar" to form OSHA-20