

IMPORTANT MATERIAL SAFETY DATA SHEET

READ CAREFULLY BEFORE USING CHEMICAL
OSHA requires that this form be kept on file.

Product No. KM 44 M
Product Name COBALT (II) NITRATE,
6-HYDRATE

24 HOUR EMERGENCY ASSISTANCE CHEMTREC 800-421-9300 HAZARD RATING	
EXTREME DANGEROUS CORROSIVE FLAMMABLE TOXIC VOLATILE	Health Hazard 2 Flammability 0 Reactivity 3

Chemical Synonyms Cobaltous Nitrate, Hexahydrate
Formula $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
C.A.S. No. 10026-22-9

Principal Hazardous Component(s)	%	P.E.L.	TLV Units
Cobalt Nitrate* CAS# 10141-05-6	>99.9	0.01 mg/m ³ (Co)	0.02 mg/m ³
Nickel Nitrate* CAS# 13138-45-9	0.01	1 mg/m ³ (Ni)	0.1 mg/m ³

* chemical subject to the reporting requirements of SARA Title III.

Melting Point (°F)	55°C (131°F)	Specific Gravity (H ₂ O=1)	N/A
Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (----- =1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Complete		
Appearance & Odor	Red crystals.		

Flash Point (Method Used)	(Minimum)°F : N/A	Flammable Limits in Air % by Volume	Lower	Upper
			-----	-----
Extinguisher Media	Foam, water, spray (fog), dry chemical, carbon dioxide.			

Special Firefighting Procedures

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards

N/A

D.O.T. Nitrates, inorganic, n.o.s. (Cobalt nitrate), 5.1, UN1477, PGII

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

Threshold Limit Value

0.02 mg.m³ (Co) ACGIH, 0.1 mg/m³ (Ni) ACGRIH

9587.

Effects of Overexposure

May cause eye, skin and upper respiratory tract irritation. Overexposure to cobalt compounds may cause respiratory sensitization and an allergic skin reaction. Cobalt compounds are mildly irritating to the eyes and if swallowed, may cause vomiting, diarrhea and a sensation of hotness. Excessive inhalation and/or ingestion of cobalt salts may affect the kidneys, lungs and thyroid. Nickel nitrate is a possible cancer hazard based on laboratory animal experiments.

Emergency and First Aid Procedures

Call physician. **SKIN:** Remove contaminated clothing. Wash with soap and water. **EYES:** Wash with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **INGESTION:** Give several glasses of water or milk. **DO NOT** induce vomiting. Never give anything by mouth to an unconscious person.

Stability		Conditions to Avoid
Stable <input checked="" type="checkbox"/>	Unstable <input type="checkbox"/>	N/A
Incompatibility (Materials to Avoid)		Avoid contact with strong oxidizing agents (e.g., hydrogen peroxide, bromine and chromic acid). Yields CO ₂
Hazardous Decomposition Products		N/A
Hazardous Polymerization		Conditions to Avoid
May Occur <input type="checkbox"/>	Will Not Occur <input checked="" type="checkbox"/>	N/A

Steps to be Taken in Case Material is Released or Spilled

Eliminate all sources of ignition (flares, flames, including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source.

Waste Disposal Method

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. Ventilate area of spill. Collect material into appropriate containers for reuse or disposal. Material may also be flushed with water to a wastewater treatment system. Dispose in closed containers in accordance with local, state and federal regulations.

Respiration Protection (Specify Type)	NIOSH/MSHA dust mask as a minimum.		
Ventilation	Local Exhaust	X	Special -----
	Mechanical (General)	-----	Other -----
Protective Gloves	Appropriate chemical resistant gloves	Eye Protection	Safety Goggles
Other Protective Equipment	Chemical resistant rubber or plastic lab apron.		

Precautions to be Taken in Handling & Storing

Keep container tightly closed when not in use.

Use product with caution around heat, sparks, pilot lights, static electricity, and open flame. Avoid generating dust.

Other Precautions

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

N/A

Approved by Steven C. Quandt Effective Date 2/2/2005 For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

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