



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. CC 365
Effective Date February 10, 1999

SECTION V HEALTH HAZARD DATA

CC 365

Threshold Limited Value

Not established for Cobalt Sulfate. As cobalt metal, dust or fume: TWA 0.02 mg/m³ (air). (ACGIH 1992-93) Toxicity Data: Oral-rat LD50: 768 mg/kg. RTEC No. GG3200000.

Effects of Overexposure

INHALATION: Prolonged or repeated exposure to the dust may produce asthma like symptoms. **EYES:** Causes irritation. **SKIN:** Prolonged or repeated exposure causes irritation and may result in an allergic skin reaction. **INGESTION:** May cause vomiting, diarrhea and a sensation of hotness. Excessive inhalation and/or ingestion of cobalt salts may effect the kidneys, lungs and thyroid.

Emergency and First Aid Procedures

INHALATION: Remove to fresh air. If irritation of upper respiratory area develops, get medical attention. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call physician. **EYES:** Flush thoroughly with water for 15 minutes, occasionally 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, then induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid
	Stable	X Excessive heat, sparks, open flame.

Incompatibility (Materials to Avoid)	Strong oxidizers.
--------------------------------------	-------------------

Hazardous Decomposition Products	Thermal decomposition or burning may produce oxides of sulfur and cobalt.
----------------------------------	---------------------------------------------------------------------------

Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Recover for use if not contaminated. Avoid making dust. Sweep up and place in an approved chemical landfill or contract with a licensed chemical waste disposal agency.
-----------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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. Dispose of in an approved chemical landfill or contract with a licensed chemical waste disposal agency.
-----------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)		None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.			
Ventilation	Local Exhaust	Recommended.		Special	No.
	Mechanical (General)	Recommended.		Other	No.
Protective Gloves		Rubber.		Eye Protection	Chemical safety glasses.
Other Protective Equipment	Safety glasses, smock, apron, proper gloves, eye wash station, ventilation hood.				

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place. Wash thoroughly after handling.
-----------------------------------------------	----------------------------------------------------------------

Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. Deliquescent material. Avoid generating dust. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing.
-------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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

Revision	No. 5	Date	2/10/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
----------	-------	------	---------	----------	-----------------	-----------------------------	----

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

Product	COBALT SULFATE, HEPTAHYDRATE
Chemical Synonyms	Cobaltous Sulfate, Heptahydrate
Formula	CoSO ₄ •7H ₂ O
Unit Size	up to 2.5 Kg
C.A.S. No.	10026-24-1

NFPA HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

HEMTREC
800-424-9300
Day 716-226-6177

Health 2
Fire 0
Reactivity 1
HMIS *

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Cobalt Sulfate, Heptahydrate	100%	See Section V.
WARNING! MAY BE HARMFUL IF SWALLOWED		
OR INHALED. CAUSES SKIN, EYE AND		
RESPIRATORY TRACT IRRITATION.		

SECTION III PHYSICAL DATA

Melting Point (°F)	96.8°C (205°F)	Specific Gravity (H ₂ O = 1)	1.95
Boiling Point (°F)	Loses 7H ₂ O, 420°C (788°F)	Percent Volatile by Volume (%)	45% @ 420°C
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate (=1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	60.4 grams per 100 mL. of water at 20°C.		
Appearance & Odor	Pink to red crystalline powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA	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.

UNUSUAL FIRE AND EXPLOSION HAZARDS

See Section VI.
Fire or excessive heat may produce hazardous decomposition products.

D.O.T. NON-REGULATED.

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