



SAFETY DATA SHEET

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SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cobalt Molybdate**
PRODUCT NUMBER: 1512-1
CAS NUMBER: 13762-14-6
SYNONYMS: Cobalt (II) Molybdenum Oxide

MANUFACTURER:

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SECTION 2 HAZARDS IDENTIFICATION

CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

Danger

Hazard Statements

H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

HMIS CLASSIFICATION:

Health: 2 Fire: 0 Reactivity Hazard: 1

NFPA RATING:

Health: 2 Flammability: 0 Reactivity Hazard: 1

SECTION 2 HAZARDS IDENTIFICATION (Cont.)

EYE CONTACT: Causes serious eye irritation.

SKIN CONTACT: May cause allergic skin reaction.

INHALATION: May cause respiratory tract irritation.

INGESTION: Toxic if swallowed.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: CoMoO₄

Molecular Weight: 218.87

CHEMICAL NAME	CAS#	%
Cobalt (II) molybdenum oxide	13762-14-6	100

SECTION 4 FIRST AID MEASURES

EYE EXPOSURE: In case of eye contact, flush the eye with plenty of water and seek medical attention.

SKIN EXPOSURE: Immediately wash with plenty of water and wash soap for at least 15 minutes while removing contaminated clothing. Get medical attention.

INHALATION: Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

SECTION 5 FIREFIGHTING MEASURES

FLASH POINT: Product is not flammable.

AUTO IGNITION TEMPERATURE: Not available

EXPLOSION LIMITS: Product does not present an explosion hazard.

EXTINGUISHING MEDIUM: Use fire fighting measures that suit the surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Metal oxide fume

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.

ENVIRONMENTAL PRECAUTIONS: Prevent spillage from entering drains or allowing to be released into the environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Sweep up and place in suitable container for proper disposal.

SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid formation of dusts and aerosols.

CONDITIONS FOR SAFE STORAGE: Store in cool, dry, and well-ventilated area. Store away from oxidizing agents.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity
Cobalt (II) Molybdenum Oxide	0.02 mg/m ³	TLV (As Co)	ACGIH
	0.1 mg/m ³	PEL (As Co)	OSHA
	10 mg/m ³	TLV (As Mo)	ACGIH
	15 mg/m ³	PEL (As Mo)	OSHA

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

EYE PROTECTION: Wear chemical safety glasses or goggles and face shield.
SKIN PROTECTION: Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.
VENTILATION: Provide local exhaust, preferably mechanical.
RESPIRATOR: Use an approved respirator.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND FORM: Blue to violet / green crystalline powder
ODOR: None
MOLECULAR WEIGHT: 218.87
BOILING POINT: No data available
MELTING POINT: No data available
SPECIFIC GRAVITY: No data available
SOLUBILITY: No data available

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: No data available
INCOMPATIBILITY: Strong oxidizing agents
DECOMPOSITION PRODUCTS: Metal oxide fumes

SECTION 11 TOXICOLOGICAL DATA

ACUTE TOXICITY: Not available
CARCINOGENIC EFFECTS: Suspected of causing cancer.
MUTAGENIC EFFECTS: Not available
TETRATOGENIC EFFECTS: Not available
CHRONIC TOXICITY: Not available
RTECS: No data

Cobalt is an experimental neoplastigen and tumorigen. It is an experimental carcinogen of the connective tissue and lungs. Cobalt metal and inorganic compounds are classified as an animal carcinogen by the ACGIH. Ingestion may cause burning in the mouth, esophagus, and stomach. Inhalation of the dusts and fumes may cause irritation of the respiratory tract, labored breathing, and coughing. Sensitization, nausea, flushing of the face, and ringing in the ears is also possible. Chronic ingestion may result in pericardial effusion, polycardial effusion, polycythemia, cardiac failure, vomiting, convulsions, and thyroid enlargement. Acute molybdenum poisoning may cause severe gastrointestinal irritation, diarrhea, coma, and death from cardiac failure. Chronic molybdenum poisoning in laboratory animals has caused loss of weight, anorexia, anemia, deficient lactation, male sterility, osteoporosis, and bone joint abnormalities.

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

SECTION 12 ECOLOGICAL DATA

Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. May cause long lasting harmful effects to aquatic life. Very toxic for aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

SECTION 14 TRANSPORTATION DATA

DOT: UN3077
Environmentally hazardous substances, solid, n.o.s.
(Cobalt (II) molybdenum oxide)

IATA: UN3077
Environmentally hazardous substance, solid, n.o.s.
(Cobalt (II) molybdenum oxide)

SECTION 15 REGULATORY INFORMATION

SARA 302/304: Not Listed

SARA 311/312: Not Listed

SARA (TITLE 313): Cobalt (II) Molybdenum oxide

CALIFORNIA PROP. 65: Not Listed

WHMIS CANADA: Class D-2A: Very toxic material causing other toxic effects

MASSACHUSETTS RIGHT TO KNOW COMPONENTS: No components are subject to the Massachusetts Right to Know Act.

NEW JERSEY RIGHT TO KNOW COMPONENTS: No components are subject to the New Jersey Right to Know Act.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS: No components are subject to the Pennsylvania Right to Know Act.

SECTION 16 OTHER INFORMATION

DISCLAIMER: The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

DATE PREVIOUSLY PREPARED: 05/15

REVISION DATE: 08/26

REVISION SUMMARY: Removed fax number. Updated color and form. All other details on this document about this product remained the same. Revisions made by EHS on 08/07/26

EHS/SDS DEPT.