



COBALT CURE[®]

SAFETY DATA SHEET

Section 1: Chemical Product and Company Identification

Product name: Cobalt Cure[®]

Catalog Codes: SLO1186

CAS#: 144-62-7

RTECS: R02450000

TSCA: TSCA 8(b) inventory: No products were found.

It is a hydrate and exempt from TSCA inventory requirements.

CI#: Not applicable.

Synonym: Ethanedoic acid

Chemical Name: Oxalic Acid

Chemical Formula: (COOH)₂

Contact Information:

United Chemical Corporation

3741 E Telegraph Rd

Piru, CA 93040

US Sales: 800-524-5550

Order Online: www.unitedchemicalcorp.com

Non-emergency assistance: 800-524-5550

Section 2: Hazards Identification

Physical Hazards: Not classified.

Health Hazards: Skin corrosion/irritation - Category 1

Serious eye damage/eye irritation - Category 1

Environmental Hazards: Not classified.

OSHA Defined Hazards: Not classified.

Label Elements (GHS-US):



Signal Word (GHS-US): Warning

Hazard Statement (GHS-US): Causes skin irritation. Causes eye irritation.

Precautionary Statements (GHS-US):

Prevention: Wash thoroughly after handling.

Response: If on skin: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention.
If in eyes: Immediately flush eyes with plenty of water for several minutes. Remove contact lenses.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental Information: Not applicable.

Section 3: Composition and Information on Ingredients

Chemical Name	CAS Number	% by weight
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Oxalic Acid

144-62-7

Cobalt Cure® is a proprietary composition and the exact concentrations of composition have been withheld as a trade secret.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion:

Not available.

Section 5: Fire and Explosion

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:

Slightly flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures.

Special Remarks on Explosion Hazards:

Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Corrosive solid. Stop leak if safe to do so. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the SDS and with local authorities.

Environmental Precautions:

Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Precautions:

Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, metals, alkalis.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.



Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 1 STEL: 2 (mg/m³) from ACGIH (TLV) [United States]

TWA: 1 STEL: 2 (mg/m³) from OSHA (PEL) [United States]

TWA: 1 STEL: 2 (mg/m³) from NIOSH [United States]

TWA: 1 STEL: 2 (mg/m³) [United Kingdom (UK)]

TWA: 1 STEL: 2 (mg/m³) [Canada] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals solid. crystalline powder.)

Odor: Odorless

Taste: Not available.

Molecular Weight: 90.04g/mole

Color: Colorless. White.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: Decomposition temperature: 189.5°C (373.1°F)

Critical Temperature: Not available.

Specific Gravity: Density: 1.9 @ 17 deg. C(Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 4.62 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility: Soluble in cold water, diethyl ether. Soluble in alcohol, glycerol. Insoluble in benzene, petroleum ether.
Solubility in cold water: 1g/7ml. Solubility in hot water: 1g/2ml.

Section 10: Stability and Reactivity

Stability:

The product is stable.

Instability Temperature:

Not available.

Conditions of Instability:

Excess heat, incompatible materials, dust generation.

Incompatibility with various substances:

Reactive with oxidizing agents, metals, alkalis.

Corrosivity:

Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Incompatible with chlorites, hypochlorites, silver and silver compounds, furfuryl alcohol. Hygroscopic; keep container tightly closed.

Special Remarks on Corrosivity:

Not available.

Polymerization:

Will not occur.

Section 11: Toxicological Information

Routes of Entry:

Absorbed through skin. Dermal contact. Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD50): 7500 mg/kg [Rat].

Chronic Effects on Humans:

May cause damage to the following organs: kidneys, the nervous system, mucous membranes, heart, brain, skin, eyes.

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion, or of inhalation. Hazardous in case of skin contact (permeate) or of eye contact (corrosive). Slightly hazardous in case of skin contact (corrosive).

Special Remarks on Toxicity to Animals:

Lowest Published Lethal Dose: LDL [woman] - Route: Oral; Dose: 660 mg/kg.

Special Remarks on Chronic Effects on Humans:

May cause adverse reproductive effects (male and female effects on fertility and effects on newborns and fetotoxicity) based on animal data Human: passes the placental barrier, detected in maternal milk.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes skin irritation. Rare chemical burns may occur. Harmful if absorbed through the skin. Eyes: Causes severe eye irritation with possible burns. It may result in corneal damage and conjunctivitis. Inhalation: Causes irritation of the respiratory tract, ulceration of the mucous membranes. Inhalation of oxalic acid may also cause digestive disturbances such as nausea and vomiting as well as affecting the nerves and urinary system and causing headache, muscular irritability, weakness, and albuminuria Ingestion: Harmful if swallowed. Causes severe digestive tract irritation and possible burns. It may affect the cardiovascular system and urinary system. Symptoms may include vomiting (often bloody or with coffee-ground appearance), diarrhea, bloody stool, hypermotility, abdominal pain, intense burning pain in the throat, esophagus, stomach, ulceration/burning of the mouth, esophagus, and stomach, severe purging, weak pulse, hypotension, cardiac irregularities, cardiovascular collapse. Other symptoms may include convulsions, headache, twitching, tetany, stupor, coma, tingling of fingers and toes, muscular irritability. Renal damage, as evidenced by oliguria, albuminuria, hematuria, may occur because Oxalic acid can bind calcium to form calcium oxalate which is insoluble at physiological pH. The calcium oxalate formed might precipitate in the kidney tubules. Hypocalcemia may also occur, which is what may affect the function of the heart and nerves and cause the above cardiovascular and nervous system effects. Chronic Potential Health Effects: Skin: Prolonged or repeated exposure may cause localized pain and cyanosis of the fingers.

Section 12: Ecological Information

Ecotoxicity:

Ecotoxicity in water (LC50): 4000 mg/l 24 hours [Fish (Bluegill)]. 1000 ppm 0.5 hours [Fish (Goldfish)]. 100 ppm 0.3 hours [Fish (Trout)].

BOD5 and COD:

Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation:

Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Avoid access to streams, lakes or ponds.

Section 14: Transport Information

DOT Classification:

Class 8: Corrosive material

Identification:

Corrosive Solid, Acidic, Organic, n.o.s. (Oxalic Acid) UNNA: 3261 PG: III

Special Provisions for Transport:

Not applicable.

Section 15: Regulatory Information

U.S. Regulations:

OSHA HAZCOM (Hazard Communication): This material is considered IRRITANT under the HAZCOM Standard (29 CFR 1910.1200).

OSHA PSM (Process Safety Management): Not regulated under PSM Standard (29 CFR 1910.119).

EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act): Not regulated.

EPA EPCRA (Emergency Planning and Community Right-to-Know Act): Not regulated.

EPA TSCA (Toxic Substance Control Act): Listed on the inventory.

EPA CERCLA (Comprehensive Environmental Response, Comprehension and Liability Act): Not regulated.

EPA SARA (Superfund Amendments and Reauthorization Act) Title III: Section 311/312: This material does not

Acute: Yes

Chronic: Yes

Fire: No

Pressure: No

Reactivity: No

EPA RMP (Risk Management Plan): Not regulated. (40 CFR 68.130)

State of California Regulations:

Prop 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): Not listed.

CalARP (California Accidental Release Prevention Program): Not regulated.

Canada Regulations:

WHMIS (Workplace Hazardous Materials Information System): No results for this product in WHMIS Classifications.

DSL (Domestic Substances List): The substance is specified on the public portion of the DSL.

DSCL (EEC):

Risk Phrase: R34 (causes burns), R41 (risk of serious eye damage)

Safety Phrases: S24/25: Avoid contact with skin and eyes.

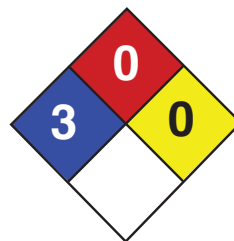
S26: In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

Section 16: Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	3
Fire	0
Reactivity	0
Personal Protection	



International Fire Code/ International Building Code: Irritant.

ANSI (American National Standards Institute):

Hazardous Industrial Chemicals - MSDS-Preparation: Complies with ANSI Z400.1 - 2004.

Hazardous Industrial Chemicals - Precautionary Labeling: Complies with ANSI Z129.1 - 2006.

References: Not available.

Other Special Considerations: Not available.

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