



Super Conductor Materials, Inc.

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Chemtrec: (800) 424-9300

Poison Center: (800) 562-8236

Revision Date: January 8th, 2019

SAFETY DATA SHEET

Identity: Chromium (VI) Oxide

Formula: CrO₃

SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 99.99

CAS #	OSHA PEL	ACGIH TLV	%
1333-82-0	N/A	N/A	0.0-100.0%

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 250°C

Vapor Pressure (vs. air or mmHg): N/A

Melting Point: 196°C

Specific Gravity (Water=1): 2.7g/cm³

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: 20°C at 2.70g/cm³

Appearance and odor: Dark red, odorless powder

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Product is not flammable

Explosive Limits: LEL: N/A

UEL: N/A

Extinguishing Media: Use suitable extinguishing agent for surrounding material and type of fire

Special Fire Fighting Procedures:

No special firefighting procedures needed. Use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing; hats, boots and gloves. If without risk, remove material from fire area.

Unusual Fire and Explosion Hazards:

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. If this product involved in a fire, toxic metal oxide fume can be released.



SECTION V - REACTIVITY DATA

Stability: Decomposition will not occur if used and stored according to specifications.

Conditions to Avoid (instability): None

Incompatibility: Reducing agents (easily oxidized materials), alkali metals, ammonia, metal powders and heat.

Hazardous Decomposition or Byproducts: Metal oxide fume.

Hazardous Polymerization: None

Conditions to avoid (hazardous polymerization): Reacts with reducing agents and flammable substances.

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other? N/A

Signs and Symptoms of Overexposure:

Inhalation: N/A

Ingestion: N/A

Skin: Strong corrosive effect on skin and mucous membranes.

Eye: Strong corrosive, irritation effect.

Health Hazards (Acute and Chronic):

To the best of our knowledge, the acute and chronic toxicity of this substance is not fully known. Chromium (VI) compounds may cause skin ulceration, gastrointestinal irritation with vomiting and diarrhea, kidney and liver damage. Overexposure may be fatal. Dusts are extremely irritation to the eyes, nose, throat and bronchial tubes. May cause cancers of the lungs, nasal cavity, sinuses, stomach and larynx.

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

May cause cancer by inhalation. Contact with combustible material may cause fire. Toxic if swallowed. Causes sever burns. May cause sensitization by skin contact.

Target Organs: Organs of the digestive suestem

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Medical Conditions Aggravated by Exposure: Gastric or intestinal disorders.

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention



SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established