



LTS Research Laboratories, Inc.
Safety Data Sheet
Chromium-Silicon Monoxide

1. Product and Company Identification

Trade Name: Chromium-silicon monoxide
Chemical Formula: Cr/SiO
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.
Street: 37 Ramland Road
City: Orangeburg
State: New York
Zip Code: 10962
Country: USA
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)
+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger



Hazard Statements: H317: May cause an allergic skin reaction
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements: P261 Avoid breathing dust/fume/vapor
P284: Wear respiratory protection
P280: Wear protective gloves/protective clothing/eye protection/face protection
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P363: Wash contaminated clothing before reuse
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0
Physical: 0

3. Composition

Chemical Family: Ceramic
Additional Names: None

Chromium-silicon monoxide (Cr/SiO):
Percentage: 100 wt%
CAS #: 70320-14-8
EC #: NIL

4. First Aid Procedures

General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Firefighting Measures

Flammability:	Non-flammable, except as powder
Extinguishing Media:	Do not use water for metal fires – use CO ₂ , sand, extinguishing powder.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits:	1 mg/m ³ as Cr, long-term value
Threshold Limit Value:	0.5 mg/m ³ as Cr, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

9. Physical and Chemical Characteristics

Color	Gray
Form:	Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	N/A

10. Reactivity

Stability:	Stable under recommended storage conditions
Reacts With:	Bases, Oxidizing agents
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes:	Causes irritating effect
Skin:	Irritant to skin and mucous membranes
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	Inorganic silicon compounds may be acute inhalation irritants. Prolonged inhalation may cause pulmonary fibrosis known as silicosis. Chromium powder, chromium (II) and chromium (III) compounds may cause nausea, diarrhea, vomiting, skin and eye irritation and pneumoconiosis. Although less likely than Cr (VI) compounds, the NTP considers all chromium to be potentially carcinogenic.

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A

Median Lethal Dose:	N/A
---------------------	-----

Carcinogen:	ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals. IARC-3: Not classifiable as to carcinogenicity to humans.
-------------	---

12. Ecological Information

Aquatic Toxicity:	Low
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous:	Not hazardous for transportation
Hazard Class:	N/A
Packing Group:	N/A
UN Number:	N/A
Proper Shipping Name:	N/A

15. Regulatory Information

Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	Yes

16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

Document Last Revised: 07/22/2015

