

CHROMIUM SILICIDE

Section I

Kurt J. Lesker Company 1925 Worthington Avenue Clairton, PA 15025 Ph: 412/387-9200 Fax: 412/233-4275		Emergency Phone Numbers Chemtrec 800/424-9300 Poison Center 800/562-8236	
Chemical Name and Synonyms Chromium Silicide		Date of Last Revision 12/26/91	
Formula $CrSi_2$	Chemical Family Metal Silicide	Chemical Abstract No. 12018-09-6	
TSCA Listed		Calc. Molecular Wt. 109.17	

Section II Hazardous Ingredients

Hazardous Ingredients	CAS #	%	TLV	OSHA PEL
Cr metal and Cr (III)	12018-09-6	100	.05mg/m ³	1 mg/m ³

Section III Physical Data

Boiling Point (0°C): Unknown	Density (gmcc): 4.39
Vapor Pressure: NA	% Volatile by Volume: NA
Reaction with Water: None	Evaporation Rate (H ₂ O -1): NA
Solubility in Water: Insoluble	Melting Point (°C): 1570
Appearance and Odor: Silver to black powder	Other Comments:

Section IV Fire & Explosion Hazard Data

Flash Point (method) Unknown	Autoignition Temp. Unknown	Flammability Non-flammable	LEI NA	UEI NA
Extinguishing Media: Agent for metal fires (like G-1 powder, Met-L-X, TEC)				
Special Fire Fighting Procedures: None				
Unusual Fire and Explosion Hazards: None				

Section V Spill or Leak Process

Steps to be Taken in Case Material is Released or Spilled: Vacuum equipped with HEPA filter.
Waste Disposal Method (Consult federal, state or local authorities for proper disposal procedures.): Dispose of in normal refuse.

Section VI Health Hazard Data

<p>Toxicity Data Cr Data: inv-rat TDLO: 2.160 mg/kg TFX:ETA imp-rat TDLO: 1.200 mg/kg TFX:ETA imp-rbt TDLO: 75 mg/kg ETA CrO₃ Data: ihl-ham TCLO: 110mg/m³:CAR scu-dog LDLO: 330mg/kg SiO₂ Data: orl-rat LD50: 3160mg/kg ipr-rat LDLO: 50mg/kg ivn-rat LD50: 15mg/kg itr-rat LDLO: 10mg/kg</p>	<p>HMIS Hazard Rating Health: 3* Flammability: 0 Reactivity: 0 Personal Protection: X</p>
<p>Route(s) of Entry Inhalation: X Skin: X Ingestion: X</p>	
<p>Effects of Overexposure (acute and chronic) Inhalation: Irritation of nose, throat, mucous membranes and soreness of nose and throat. Trivalent chromium compounds have not been shown to be respiratory carcinogens. Certain individuals may develop respiratory sensitivity to this compound. Dermal/Eye Contact: Mild irritant. Eczematous dermatitis may occur from repeated skin contact. Low oral toxic. Other (specify):</p>	
<p>Medical Conditions Generally Aggravated by Exposure: Respiratory disorders.</p>	
<p>Carcinogenicity: Yes, Chromium NTP: Yes IARC Monographs: Yes OSHA Regulations: Yes</p>	
<p>Emergency and First Aid Procedures Ingestion: Induce vomiting. Inhalation: Remove to fresh air Skin Contact: Flush with soap and water Eye Contact: Flush to remove particles</p>	

Section VII Reactivity Data

<p>Stable: X Unstable:</p>	<p>Conditions Contributing to Instability: None</p>
<p>Incompatibility (materials to avoid): Strong acids, strong bases</p>	
<p>Hazardous Decomposition Products - Thermal and Other (list): None</p>	
<p>Hazardous Polymerization May Occur: Will Not Occur: X</p>	<p>Conditions to Avoid: Heat flame and incompatible materials</p>

Section VIII Special Protective Information

<p>Respiratory Protection (specify type). Use Only Niosh Approved Equip. Air purifying respirator in dusty conditions.</p>	
<p>Ventilation (always maintain exposure below permissible limits) Local Exhaust: Recommended Mechanical (general): Special: Other:</p>	
<p>Protective Gloves: Neoprene</p>	<p>Eye Protection: Safety Goggles</p>

Other Protective Equipment/Work Practices: Normal Laboratory wear.

Section IX Special Precautions

Precautions to be Taken in Handling and Storing: Reported as a suspect carcinogen by NTP.

Transportation Requirements

DOT Class: Not classified as hazardous

UN Number: Not classified as hazardous

IMCO Class: Not classified as hazardous

Other:

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, the Kurt J. Lesker Company makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon: User should satisfy himself that he had all current data relevant to his particular use.

ND = NO DATA FOUND

NA = NOT APPLICABLE