


MATERIAL SAFETY DATA SHEET

911 Commerce Court
Buffalo Grove, IL 60089-2375
1-800-727-4368

WLC4564R
WLC4564T
MSDS No.
Effective Date April 9, 1998

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	SILICON METAL LUMPS	 <p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4</p> <p>HMIS* 0 0 0</p>
Chemical Synonyms	Silicon Metal	
Formula	Si	
Unit Size	up to 500 grams	
C.A.S. No.	7440-21-3	

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Silicon Metal Lumps	100%	See Section V.
CAUTION! DO NOT INHALE AS FUME OR DUST.		
NOT HAZARDOUS IN FORM SUPPLIED.		
FLAMMABLE SOLID, IRRITANT AS DUST.		

SECTION III PHYSICAL DATA

Melting Point (°F)	1420°C (2588°F)	Specific Gravity (H ₂ O = 1)	2.42 @ 20°C
Boiling Point (°F)	2620°C (4748°F)	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	1 mm @ 1724°C	Evaporation Rate	Not applicable.
Vapor Density (Air=1)	Not determined.		
Solubility in Water	Insoluble.		
Appearance & Odor	Metallic silver lumps, cubic, steel-gray crystals or dark brown powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Not flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES

None known. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dangerous when heated, it will react with water or steam to produce hydrogen; can react with oxidizing materials. Flammable as dust.

SECTION V HEALTH HAZARD DATA

SS 151

Threshold Limited Value ACGIH 1992-93 (TLV): TWA = 10 mg/m³, for total dust ... containing no asbestos and less than 1% crystalline silica; STEL 20 mg/m³ (Dust).

Effects of Overexposure None known except for inhalation of silicon in the dust form. Inhalation of dust causes irritation to lungs, eyes and mucous membranes.

Emergency and First Aid Procedures

INHALATION OF DUST: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **EYES:** When dust comes in contact with eyes, do not rub eyes. Flush thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention. **SKIN:** Wash with soap and water.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Avoid generation of airborne dust.
	Stable	X		
Incompatibility (Materials to Avoid)	Strong oxidizing materials, strong bases, acids. Reacts with halides.			
Hazardous Decomposition Products	Silicon reacts with sodium hydroxide to generate flammable hydrogen gas.			
Hazardous Polymerization	Conditions to Avoid		Not applicable.	
	May Occur	Will Not Occur		
		X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Recover for use if not contaminated. Avoid creating dust. Sweep up and place in a suitable container for proper disposal. Flush spill area with soap and water.

Waste Disposal Method Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only. Uncontaminated material may be disposed of in a sanitary landfill. Check local codes.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.			
Ventilation	Local Exhaust	If dusty.	Special	No.
	Mechanical (General)	If dusty.	Other	No.
Protective Gloves	Rubber.		Eye Protection	Chemical safety glasses.
Other Protective Equipment	Lab coat, apron, eye wash station, proper gloves, ventilation hood.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a cool place. Wash thoroughly after handling. Do not inhale silicon dust. Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision No. 3 | Date 4/9/98 | Approved Michael Raszeja | Chemical Safety Coordinator MR

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20