



# Exolon Company

## ***MATERIAL SAFETY DATA SHEET***

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### **SECTION I. Product Identification**

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**PRODUCT NAME:** Silicon Carbide (Metallurgical)

**CAS #** 409-21-2

**TRADE NAME(S):** Exo-Sil

**H.S.#** 1360

**CHEMICAL FORMULA:** SiC

**D.O.T. Name:** None

**MANUFACTURERS NAME:** Exolon Company

**ADDRESS:** R.R. 1, Box 200A (ESK Road)  
Hennepin, IL 61327

**EMERGENCY TELEPHONE NO.:** (815) 925-7302

**TELEPHONE NO. FOR INFORMATION:** (815) 925-7302

**DATE PREPARED:** April 7, 1989

**REVISED:** January 1, 2002

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### **SECTION II. Hazardous Ingredients Information**

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% COMP. HAZARDOUS COMPONENTS	CAS #	OSHA PEL <sup>1</sup>	ACGIH TLV <sup>2</sup>
88-92% Silicon Carbide	409-21-2	10 Mg/M <sup>3</sup> 5 Mg/M <sup>3</sup> *	10 Mg/M <sup>3</sup>
< 4% Graphite(Synthetic)	None	10 Mg/M <sup>3</sup> 5 Mg/M <sup>3</sup> *	2 Mg/M <sup>3</sup> *
< 1% Silicon (Si)	7440-21-3	10 Mg/M <sup>3</sup> 5 Mg/M <sup>3</sup> *	10 Mg/M <sup>3</sup>
< 7% Free Silica (SiO <sub>2</sub> ) as alpha quartz	14808-60-7	10 Mg/ M <sup>3</sup> / (%SiO <sub>2</sub> + 2)*	0.1 Mg/ M <sup>3</sup>

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<sup>1</sup> - Occupational Safety and health Administration Final Rule Permissible exposure Limits.

<sup>2</sup> - American Conference of Governmental Industrial Hygienists Threshold Limit Values.

\* - Respirable fraction: determined using industrial hygiene methods.

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### SECTION III. Physical / Chemical Characteristics

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**BOILING POINT:** Decomposes at 2210°C  
Sublimes at 2000°C  
**VAPOR PRESSURE:** NA  
**VAPOR DENSITY:** NA  
**pH:** 9.0 to 10.5  
**SPECIFIC GRAVITY (H<sub>2</sub>O = 1):** 3.17  
**MELTING POINT:** See Boiling Point  
**EVAPORATION RATE:** NA  
**SOLUBILITY IN WATER:** Insoluble  
**APPEARANCE AND ODOR:** Dull grey crystal ---No odor

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### SECTION IV. Fire and Explosion Hazard Data

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**FLASH POINT:** NA    **FLAMMABLE LIMITS:** NA    **LEL:** NA    **UEL:** NA  
**EXTINGUISHING MEDIA:** NA  
**SPECIAL FIRE FIGHTING PROCEDURES:** NA  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None (Material is **NOT** combustible.)

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### SECTION V. Reactivity Data

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**STABILITY:** Stable  
**INCOMPATIBILITY:** NA  
**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** None  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** Contact of powerful oxidizers with SiO<sub>2</sub> may cause fires.

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## SECTION VI. Health Hazard Data

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**ROUTE(S) OF ENTRY:** Inhalation

**HEALTH HAZARDS:**

*Acute effects:* May irritate eyes, skin and upper respiratory system.

*Chronic effects:* May lead to extensive fibrosis and progressive lung disease.

**CARCINOGENICITY:**

**NPT:** No

**IARC MONOGRAPHS:** SiO<sub>2</sub> is classified as Group 1 (Carcubigebuc to Humans)

**OSHA REGULATED:** No

**SIGNS AND SYMPTOMS OF EXPOSURE:** Respiratory distress, cough or shortness of breath.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Any respiratory condition.

**EMERGENCY AND FIRST-AID PROCEDURES:**

Remove from area of dust exposure. If dust gets in eyes, flush immediately with large quantities of clean cool water.

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## SECTION VII. Precautions for Safe Handling and Use

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**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Sweep, shovel or vacuum material. Limit exposure to dust.

**WASTE DISPOSAL METHOD:** May be landfilled in accordance with state, federal and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Limit generation of dust.

**OTHER PRECAUTIONS:** Particles may be sharp and cause cuts and abrasions to skin and eyes.

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## SECTION VIII. Control Measures

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**RESPIRATORY PROTECTION:**

NIOSH approved dust respirator recommended for limiting exposure. Similar respiratory protection required at concentrations above PEL.

**VENTILATION:** Local exhaust recommended.

**PROTECTIVE GLOVES:** Recommended to prevent cuts and abrasions.

**EYE PROTECTION:** Recommended

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None

**WORK/HYGIENIC PRACTICES:** Minimize generation of dust.

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## SECTION IX. SARA Title III Reporting

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To the best of our knowledge this product does not contain any substances requiring reporting on the SARA, Title III, Section 313 list. (listing as of 05/92).

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The information published in this Material Safety Data Sheet has been compiled from our experience, and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the user's application and for adopting necessary safety precautions.