



Exolon Company

MATERIAL SAFETY DATA SHEET

SECTION I. Product Identification

PRODUCT NAME: Silicon Carbide (Metallurgical) **CAS #** 409-21-2
TRADE NAME(S): Carbolon MA , Lump 97, Injector Grade SiC **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, 2003

SECTION II. Hazardous Ingredients Information

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

¹ - Occupational Safety and health Administration Final Rule Permissible exposure Limits.

² - American Conference of Governmental Industrial Hygienists Threshold Limit Values.

* - Respirable fraction: determined using industrial hygiene methods.

SECTION III. Physical / Chemical Characteristics

BOILING POINT: Decomposes at 2210°C
Sublimes at 2000°C
VAPOR PRESSURE: NA
VAPOR DENSITY: NA
pH: 9.0 to 10.5
SPECIFIC GRAVITY (H₂O = 1): 3.17
MELTING POINT: See Boiling Point
EVAPORATION RATE: NA
SOLUBILITY IN WATER: Insoluble
APPEARANCE AND ODOR: Dull grey crystal ---No odor

SECTION IV. Fire and Explosion Hazard Data

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.)

SECTION V. Reactivity Data

STABILITY: Stable
INCOMPATIBILITY: NA
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Contact of powerful oxidizers with SiO₂ may cause fires.

SECTION VI. Health Hazard Data

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: SiO₂ is classified as Group 1 (Carcubigebug 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.

SECTION VII. Precautions for Safe Handling and Use

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.

SECTION VIII. Control Measures

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.

SECTION IX. SARA Title III Reporting

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).

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.