

**WASHINGTON MILLS**ELECTRO MINERALS  
COMPANY**MATERIAL SAFETY DATA SHEET****1.0 Chemical Product and Company Identification**

**Product Name:** Silcaride Type P D/C Fines,  
Silcaride No. 5 RF Grit Fractions,  
Silcaride No. 5 RF Fines

**Chemical Name:** SILICON CARBIDE

**Company Name:** Washington Mills Electro Minerals Corp.  
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Niagara Falls, NY 14302  
(716) 278-6600 Fax (716) 278-6654  
**Emergency/Technical** (716) 278-6763  
**CHEMTREC** (800) 424-9300

**2.0 Composition/Information on Ingredients**

Component	CAS No.	OSHA Exposure Limits (PEL)	ACGIH Rec. Limits (TLV)	Percent By Weight
Silicon Carbide	409-21-2	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	90
Silicon Dioxide	7631-86-9	80mg/m <sup>3</sup> % SiO <sub>2</sub>	30mg/m <sup>3</sup> % quartz + 3	4 - 5
Free Carbon	7440-44-0	NA	NA	3
Free Silicon	7440-21-3	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	0.5 - 1
Iron	7439-89-6	NA	NA	0.5 - 1
Crystalline Silica ** (Impurities total less than 1%)	NA	* See Below	0.05mg/m <sup>3</sup>	1 - 4

\* OSHA PEL for crystalline silica is calculated as:  
(Total dust) PEL =  $\frac{30 \text{ mg/m}^3}{\% \text{quartz} + 2(\% \text{cristobalite}) + 2(\% \text{tridymite})} + 2$

\*\* International Agency for Research on Cancer (IARC) - IARC human carcinogen.

**3.0 Hazard Identification/ Potential Health Effects**

**Eye:** May irritate eyes.  
**Skin:** Not absorbed through the skin. May cause abrasions.  
**ingestion:** No known adverse effects, but ingestion not recommended.  
**Inhalation:** May cause coughing or shortness of breath.

**Chronic Effects:** Prolonged exposure to crystalline silica can cause lung scarring which may lead to a progressive massive fibrosis and chronic lung injury (silicosis). Silicon Carbide may alter the course of inhalation tuberculosis leading to extensive fibrosis and progressive disease.

**Carcinogenicity:** IARC labels crystalline silica as a 1A (Probable human) Carcinogen.

**4.0 First Aid Measures**

**Eyes:** Wash with large amounts of water. Get medical attention, if needed.  
**Skin:** Wash with water. Obtain first aid or medical assistance if needed.  
**Ingestion:** If swallowed, seek medical attention.  
**Inhalation:** Remove to fresh air, apply artificial respiration as needed. Get medical attention if needed

**5.0 Fire Fighting Measure**

**Flammable Properties:** Non-flammable  
**Flash Point:** None **Fire/Explosion Potential:** None  
**Upper and Lower Flammable Limits:** None  
**Autoignition Temperature:** None  
**Special Fire Fighting Procedures:** None

**6.0 Accidental Release Measures**

**Personal Precautions:** Wear protective equipment. See Section 8.  
**Cleanup Measures:** Normal cleanup procedures. Avoid generating dust. Dispose according to standard landfill methods consistent with applicable Federal, State and Local laws.

**7.0 Handling and Storage**

**Normal Storage:** General storage, ambient air temperature and pressure.  
**Handling:** Avoid generating dust. Handle with adequate ventilation for dust. See OSHA 29 CFR 1910-94 (Ventilation).

**8.0 Exposure Controls, Personal Protection**

**Engineering Control:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below PELs or TLVs.

**Respiratory Protection:** Recommended if TLVs or PELs are exceeded. Use NIOSH/MSHA approved respirators.

**Skin and Hand Protection:** Gloves as desired by user.

**Eye and Face Protection:** Use safety glasses with side shields. If there is potential for exposure to particles which could cause mechanical injury to the eye, wear goggles.

**9.0 Physical and Chemical Properties**

**Appearance:** Granular Black or Green

**Odor:** Odorless

**pH:** N/A

**Boiling Point:** Sublimes

**Melting Point:** Sublimes

**Flash Point:** None

**Explosive Properties:**

None

**Oxidizing Properties:** None

**Vapor Pressure:** N/A

**Vapor Density:** N/A

**Specific Gravity:** 3.2

**Water Solubility:** Insoluble

**Solubility in other solvent:** Fuming KOH, Insoluble in most acids

**15.0 Regulatory Information**

**TSCA -** The chemical components of this product are registered under the Toxic Substance Control Act. (Title 40 CFR Part 710).

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*The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, Washington Mills Electro Minerals Corporation makes no expressed or implied warranty with respect to the accuracy of the information or the suitability of the recommendations and assumes no liability to any user thereof.*

**10.0 Stability and Reactivity**

**Chemical Stability:** Stable

**Polymerization:** Will not occur

**Incompatibility:** None

**Conditions to Avoid:** N/A

**11.0 Toxicological Information**

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans (Vol. 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to humans, IARC Class A.

**12.0 Ecological Information**

Not Available

**13.0 Disposal Considerations**

Approved landfill in accordance with all local, state and federal regulations.

**14.0 Transportation Information**

US DOT - Not regulated as a hazardous material.