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.

1801 Buffalo Ave.
P.O. Box 423
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^3	10 mg/m^3	90
Silicon Dioxide	7631-86-9	80mg/m^3 / % SiO_2	30mg/m^3 / % quartz + 3	4 - 5
Free Carbon	7440-44-0	NA	NA	3
Free Silicon	7440-21-3	15 mg/m^3	10 mg/m^3	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^3	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

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.

15.0 Regulatory Information

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

Prepared By: Margaret A. O'Brien,
Manager, Environmental, Health & Safety

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