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SAFETY DATA SHEET

1.0 IDENTIFICATION

1.1 GHS product identifier: ICO Iron Guard Slurry, Part C

1.2 Other means of identification: Aggregate

1.3 Recommended use of the chemical and restrictions on use: N/A

1.4 Supplier's details: MILAMAR COATINGS, INC.

311 NW 122ND STREET, SUITE 100 OKLAHOMA CITY, OK 73114

INFORMATION PHONE NUMBER: 405-755-8448

1.5 Emergency phone number: 1-800-255-3924 or 813-248-0585 (INTERNATIONAL)

2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Acute Toxicity – Inhalation 4, Carcinogenicity 1A

2.2 GHS label elements:



Signal Word: Warning

Hazard Statement: Harmful if inhaled

Prevention: Avoid breathing dust. In case of inadequate ventilation wear respiratory protection.

Response: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Disposal: Dispose of in accordance with federal, state, and local regulations.



Signal Word: Danger

Hazard Statement: May cause cancer

Prevention: Avoid breathing dust. In case of inadequate ventilation wear respiratory protection.

Response: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Disposal: Dispose of in accordance with federal, state, and local regulations.

- 2.3 Other hazards which do not result in classification: N/A
- 2.4 Hazards Material Information System (United States):

Health	1*
Flammability	0
Physical Hazard	0

Hazard Codes: Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard

3.0 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical Identity	CAS No.	Concentration
Quartz	14808-60-7	70-80%
Silicon Carbide	409-21-2	20-30%

4.0 FIRST-AID MEASURES

4.1 Description of necessary first-aid measures:

Eye Contact: Wash with water for at least fifteen (15) minutes. If irritation or redness persists, see a physician.

Skin Contact: Wash with soap and water. If irritation persists, see a physician.

Inhalation: Shortness of breath, coughing, reduced pulmonary function. PROLONGED INHALATION OF RESPIRABLE SILICA WILL RESULT IN PERMANENT LUNG DAMAGE, SILICOSIS. No specific first aid is necessary since the adverse health effects associated with exposure to crystalline silica (quartz) result from chronic exposures. If there is a gross inhalation of crystalline silica (quartz), remove the person immediately to fresh air, give artificial respiration as needed, seek medical attention as needed.

Ingestion: May cause gastrointestinal discomfort. Give one or two glasses of water. If discomfort persists, see a physician

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4.2 Most Important symptoms/effects, acute and delayed:

Signs and Symptoms: Generally, there are no signs or symptoms of exposure to crystalline silica (quartz). **Aggravated Medical Conditions:** The condition of individuals with lung disease (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) can be aggravated by exposure.

Other Health Effects: Silicosis: Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis may be progressive; it may lead to disability and death.

4.3 Indication of immediate medical attention and special treatment needed, if necessary: The adverse health effects – silicosis, cancer, autoimmune diseases, tuberculosis, and nephrotoxicity – are chronic effects.

5.0 FIRE-FIGHTING MEASURES

- **5.1 Suitable extinguishing media:** Crystalline silica (quartz) is not flammable, combustible, or explosive.
- 5.2 Specific hazards arising from the chemical: N/A
- 5.3 Special protective actions for fire-fighters: N/A

6.0 ACCIDENTAL RELEASE MEASURES

- **6.1 Personal precautions, protective equipment and emergency procedures:** Ventilate the area. Avoid breathing dust. Use self-contained breathing apparatus or supplied air for large spills or confined areas.
- **6.2 Methods and materials for containment and clean up:** Clean up using approved, dustless methods (water or vacuum) to minimize generation of respirable silica particles. Dispose of in accordance with federal, state, and local regulations.

7.0 HANDLING AND STORAGE

- **7.1 Precautions for safe handling:** Use NIOSH approved equipment. Positive pressure supplied air-type recommended. Appropriate respiratory protection for respirable particulates is based on consideration of airborne workplace concentrations and duration of exposure arising from the intended end use.
- **7.2** Conditions for safe storage, including any incompatibilities: Avoid generating dust. There are no special storage requirements.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	CAS No.	Percent	Exposure Limits	Source
Quartz	14808-60-7	70-80	0.1 mg/m3	ACGIH
Quartz	14606-00-7	70-80	10mg/m3	OSHA

- **8.2** Appropriate engineering controls: N/A
- 8.3 Individual protection measures, such as personal protective equipment:

Respiratory Protection: See 7.1

Protective Clothing: Protective clothing not normally required.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

- **9.1** Appearance (physical state, color, etc.): fine particulate
- 9.2 Odor: N/A
- 9.3 Odor threshold: N/A
- **9.4 pH:** N/A
- 9.5 Melting point/freezing point: N/A
- 9.6 Initial boiling point and boiling range: N/A
- 9.7 Flash Point: N/A
- 9.8 Evaporation rate: N/A
- 9.9 Flammability (solid, gas): N/A
- 9.10 Upper/lower flammability or explosive limits: N/A
- **9.11 Vapor pressure:** 10 mm @ 1710 degrees C
- 9.12 Vapor Density: N/A
- 9.13 Relative density (specific gravity): 1.85
- **9.14 Solubility(ies):** Insoluble (in water)
- 9.15 Partition coefficient; n-octanol/water: N/A
- $\textbf{9.16} \quad \textbf{Auto-ignition temperature: N/A}$
- **9.17 Decomposition temperature:** N/A
- 9.18 Viscosity: N/A

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10.0 STABILITY AND REACTIVITY

10.1 Reactivity: N/A

10.2 Chemical stability: N/A

10.3 Possibility of hazardous reactions: Will not occur by itself.

10.4 Conditions to avoid: None

10.5 Incompatible materials: CIF3, MnF3, OF210.6 Hazardous decomposition products: None

11.0 TOXICOLOGICAL INFORMATION

11.1 Likely routes of exposure: N/A

11.2 Symptoms related to the physical, chemical and toxicological characteristics:

Eye Contact: Does not cause eye irritation but may cause abrasion of the cornea.

Skin Contact: does not cause skin irritation.

Inhalation: The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust.

Silicosis can exist in several forms, chronic (or ordinary), accelerated or acute.

Ingestion: May cause gastrointestinal discomfort if swallowed.

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure: N/A

11.4 Numerical measures of toxicity:

Ingredient Name	CAS No.	%	Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
Quartz	14808-60-7	70-80	> 22,500 mg/kg (rat)		

12.0 ECOLOGICAL INFORMATION

12.1 Ecotoxicity: N/A

12.2 Persistence and degradability: N/A12.3 Bioaccumulative potential: N/A

12.4 Mobility in soil: N/A12.5 Other adverse effects: N/A

13.0 DISPOSAL CONSIDERATIONS

13.1 Disposal methods: Dispose of in accordance with federal, state, and local regulations.

14.0 TRANSPORT INFORMATION

14.1 UN number: Not regulated

14.2 UN proper shipping name: Not regulated

14.3 Transport hazard class(es): N/A
14.4 Packing group, if applicable: N/A
14.5 Environmental hazards: N/A
14.6 Transport in bulk: N/A

14.7 Special precautions for user: N/A

15.0 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations:

Not meant to be all-inclusive. Selected regulations presented.

A. SARA Title III Section 311/312 hazards: not listed

B. WHMIS Classification: D2A

C. TSCA Status: listed on TSCA InventoryD. OSHA Hazard Comm. Std.: not listed

Crystalline silica (quartz): CA65

CA = California Haz. Subst. List; CA65 = California Safe Drinking Water and Toxics Enforcement Act List; CT = Connecticut Tox. Subst. List; FL = Florida Subst. List; IL = Illinois Tox. Subst. List; LA = Louisiana Haz. Subst. List; MA = Massachusetts Subst. List; ME = Maine Haz. Subst. List; MN = Minnesota Haz. Subst. List; NJ = New Jersey Haz. Subst. List; PA = Pennsylvania Haz. Subst. List; RI = Rhode Island Haz. Subst. List.

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16.0 OTHER INFORMATION

16.1 Date of Preparation: 6/1/2015

To the best of our knowledge, the information contained herein is accurate. Final determination of the suitability of any material is the sole responsibility of the users. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.