



# ASHINE INDUSTRIES INC.

## SAFETY DATA SHEET

DATE: JAN. 01, 2018

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY INFORMATION

**1.1 PRODUCT IDENTIFIER:**

**Silicon Carbide, Silicon Carbide Grains, Silicon Carbide Sand, Black Silicon Carbide, Green Silicon Carbide, Ashine Silicon Carbide**  
**CAS NUMBER: 409-21-2**

**1.2 DETAILS OF THE SUPPLIER OF THE SUBSTANCE AND THE SAFETY DATA SHEET:**

**Ashine Industries Inc.**  
**5 Orchid Court**  
**Toronto, ON M2L 2X8 Canada**  
**Tel: 416 493 5187**  
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**Website: [www.ashine.com](http://www.ashine.com)**

**1.3 EMERGENCY TELEPHONE NUMBER**

**TELEPHONE: 416 493 5187**

### SECTION 2: HAZARDS IDENTIFICATION

**2.1 CLASSIFICATION OF THE SUBSTANCE:**

**SILICON CARBIDE GRAINS**  
**EU CLP CLASSIFICATION (1272/2008): Not hazardous**  
**GHS CLASSIFICATION: Not hazardous**  
**US OSHA CLASSIFICATION (29CFR1910.1200): Not hazardous**

**2.2 LABEL ELEMENTS:**

**Not hazardous in accordance with the Globally Harmonized System (GHS) for the classification and Labeling of Chemicals**

**2.3 OTHER HAZARDS:**

**When the particle size becomes smaller than 240, there will be more dust. Avoid prolonged exposure to high concentration of the dust. Exposures to high concentration of dust may cause breath shortness and other unwell.**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 MIXTURES**

Mixture of substances listed below

<b>HAZARDOUS INGREDIENT</b>	<b>(%) WEIGHT PERCENTAGE</b>	<b>CAS NUMBER</b>	<b>HAZARD PICTOGRAM</b>	<b>HAZARD STATEMENT AND RISK</b>
Silicon Carbide SiC	>98.5%	409-21-2	None	Not hazardous, substance with a community workplace exposure limit
Iron Oxide Fe <sub>2</sub> O <sub>3</sub>	<0.15%	1309-37-1	None	Not hazardous, concentration in percentage small to be any health concern
Free Iron Fe	<0.15%	7439-89-6	None	Not hazardous, concentration in percentage small to be any health concern
Silicon oxide SiO <sub>2</sub>	<0.10%	14808-60-7	Yes	Silicon oxide can be carcinogenic. Concentration in percentage small to be health concern
Free Silicon Si	<0.10%	7440-21-3	None	Not hazardous, concentration in percentage small to be any health concern
Aluminum oxide Al <sub>2</sub> O <sub>3</sub>	<0.10%	1344-28-01	None	Not hazardous, Concentration in percentage small to be any health concern

**SECTION 4: FIRST AID MEASURES****4.1 DESCRIPTION OF FIRST AID MEASURES****GENERAL INFORMATION:**

No special measures are required

**INHALATION:**Bring to fresh air or provide oxygen treatment if affected person has difficulty breathing.  
Consult doctor in case of complaints**SKIN CONTACT:**Brush off loose particles and dust from skin. Wash exposed area with soap and water.  
If skin irritation is experienced, consult a doctor.**EYE CONTACT:**Remove eye contact lens if present. Flush opened eyes thoroughly with water.  
If symptoms persist, consult a doctor.**INGESTION:**Rinse out mouth with water, then drink plenty of water. Do not induce vomiting.  
Consult doctor if there is complaint**4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

Dust may cause human respiration system, eye and skin irritation. Prolonged exposure of high

concentration of dust may cause adverse effects on the lungs. Main route of exposure is inhalation.

**4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED**

Use common sense if any complaints occurred.

**SECTION 5: FIRE-FIGHTING MEASURES**

**5.1 EXTINGUISHING MEDIA SUITABLE EXTINGUISHING MEDIA:**

Use any extinguishing method / media which are suitable for the surrounding condition

**UNSUITABLE EXTINGUISHING MEDIA:**

None

**5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

No relevant information available

**5.3 ADVICE FOR FIRE-FIGHTERS:**

Wear full fire-fighting gear

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**

Ensure adequate ventilation and fresh air. Avoid dust formation and avoid buried by the substance. Use respiratory protective device for dust. Wear protective clothing. Avoid substance into eyes.

**6.2 ENVIRONMENTAL PRECAUTIONS:**

Avoid the substance enters water supply, sewer or ground surface.

**6.3 METHODS AND MATERIAL FOR CONTAINMENT:**

Pick up the substance with shovel or other mechanical loader. Place the substance in suitable container for disposal.

**SECTION 7: HANDLING AND STORAGE**

**7.1 PRECAUTIONS FOR SAFE HANDLING:**

Avoid breathing substance dust. Use adequate ventilation when handling the substance. Avoid direct contact with skin and eyes. After handling, wash thoroughly to clean up.

**7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

No special storage required

<b>SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION</b>
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**8.1 CONTROL PARAMETERS**

<b>SILICON CARBIDE</b>	409-21-2	<b>PEL(USA)</b>	<b>5 mg/m<sup>3</sup> (respirable), 15 mg/m<sup>3</sup> (total dust)</b>
		<b>REL(USA)</b>	<b>5 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>
		<b>TLV(USA)</b>	<b>3 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>
		<b>EL(CANADA)</b>	<b>3 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>
		<b>EV(CANADA)</b>	<b>3 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>

<b>SILICON OXIDE</b>	14808-60-7	<b>PEL(USA)</b>	
		<b>REL(USA)</b>	<b>0.05 mg/m<sup>3</sup> (respirable)</b>
		<b>TLV(USA)</b>	<b>0.025 mg/m<sup>3</sup> (respirable)</b>
		<b>EL(CANADA)</b>	<b>0.025 mg/m<sup>3</sup> (respirable)</b>
		<b>EV(CANADA)</b>	

<b>SILICON</b>	7440-21-2	<b>PEL(USA)</b>	<b>5 mg/m<sup>3</sup> (respirable), 15 mg/m<sup>3</sup> (total dust)</b>
		<b>REL(USA)</b>	<b>5 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>
		<b>TLV(USA)</b>	
		<b>EL(CANADA)</b>	<b>3 mg/m<sup>3</sup> (respirable), 10 mg/m<sup>3</sup> (total dust)</b>
		<b>EV(CANADA)</b>	<b>10 mg/m<sup>3</sup> (respirable)</b>

**8.2 EXPOSURE CONTROLS:**

**APPROPRIATE ENGINEERING CONTROLS:**

Use adequate general and local ventilation to maintain exposure below the occupational exposure limits.

**PERSONAL PROTECTIVE MEASURES:**

No respiration protection gear is necessary if the concentration of the substance dust is below exposure limits. For eye protection, use safety glasses with side shields or goggles. No special protective clothing is necessary. If substance deposits on body or hands, use water to wash them off thoroughly.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 BASIC PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE</b>	<b>Granular, powder</b>	<b>SPECIFIC GRAVITY</b>	<b>3.1 g/mm<sup>3</sup></b>
<b>COLOR</b>	<b>Green, black</b>	<b>SOLUBILITY</b>	<b>none</b>
<b>ODOR</b>	<b>Odorless</b>	<b>Viscosity</b>	<b>Not Available</b>
<b>PH VALUE</b>	<b>Neutral</b>	<b>EVAPORATION RATE</b>	<b>Not Available</b>
<b>MELTING POINT</b>	<b>2,700° C</b>	<b>VAPOR DENSITY</b>	<b>None</b>
<b>FREEZING POINT</b>	<b>Not Available</b>	<b>FLASH POINT</b>	<b>Not Available</b>
<b>AUTO IGNITION TEMPERATURE</b>	<b>None</b>	<b>DECOMPOSITION TEMPERATURE</b>	<b>None</b>
<b>EXPLOSIVE PROPERTY</b>	<b>None</b>	<b>PARTITION COEFFICIENT</b>	<b>Not Available</b>
<b>FALMABILITY (SOLID, GAS)</b>	<b>None</b>	<b>BOILING POINT</b>	<b>Not Available</b>

**SECTION 10: STABILITY AND CHEMICAL PROPERTIES****10.1 REACTIVITY**

It is a very inert inorganic substance

**10.2 CHEMICAL STABILITY**

It is stable and will not react with other material under normal use or storage.

**10.3 POSSIBILITY OF HAZARDOUS REACTIONS**

Not Known

**10.4 CONDITIONS TO AVOID**

Not Known

**10.5 INCOMPATIBLE MATERIALS**

Not Known

**10.6 HAZARDOUS DECOMPOSITION PRODUCTS**

No decomposition will occur. But when the substance is used to machine other materials, hazardous material may occur due to the property of the material being machined.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:****INHALATION**

Breath the dust may cause irritation to nose, throat and upper respiration tract.

**SKIN CONTACT**

May cause skin irritation

**EYE CONTACT**

May cause eye irritation or injury

**INGESTION**

Not toxic. But swallow the substance may cause stomach disturbances.

**CHRONIC HEALTH EFFECTS:**

Prolonged inhalation of the substance dust may cause adverse lung effects.

**ACUTE TOXICITY VALUES:**

No sign of acute toxicity in animal inhalation studies.

**GERM CELL MUTAGENICITY**

The substance is not expected to present a risk of genetic damage.

**CARCINOGENICITY**

The substance is not listed as a carcinogen by OSHA.

**DEVELOPMENT AND PRODUCTIVITY TOXICITY**

No specific data is available. This substance is not expected to present a risk of adverse reproductive or development toxicity.

**SPECIFIC TARGET ORGAN TOXICITY**

No increased mortality or cancer morbidity was observed in epidemiological study of workers exposed to the substance.

<b>SECTION 12: ECOLOGICAL INFORMATION</b>
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**12.1 TOXICITY:**

There is no information about the Aquatic toxicity

**12.2 PRESISTENCE AND DEGRADABILITY:**

None available

**12.3 BIOACCUMULATIVE POTENTIAL:**

None available

**12.4 MOBILITY IN SOIL**

None available

**12.5 OTHER ADVERSE EFFECTS:**

None Available

<b>SECTION 13: DISPOSAL CONSIDERATIONS</b>
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**13.1 WASTE TREATMENT METHODS**

Dispose the substance with all local and national regulations. Contact waste processors for

recycling information and disposal information. Do not dispose it together with household garbage. Do not dispose it into sewer system.

#### **SECTION 14: TRANSPORTATION INFORMATION**

- 14.1 UN NUMBER**  
US DOT: None, Canadian TDG: None
- 14.2 UN PROPER SHIPPING NAME**  
Not regulated
- 14.3 HAZARD CLASS**  
Not classified as dangerous for transportation
- 14.4 ENVIRONMENTAL HAZARDS**  
None
- 14.5 SPECIAL PRECAUTIONS**  
None

#### **SECTION 15: REGULATORY INFORMATION**

- 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC TO THE SUBSTANCE**  
TSCA (Toxic Substance Control Act)  
Silicon Carbide is listed on the TSCA inventory under CAS# 409-21-2
- CANADA (DSL/NDSL)**  
Listed - DSL

#### **SECTION 16: OTHER INFORMATION**

- 16.1 Concentration of airborne particles are risky to human respiration and gastrointestinal system. Use good industrial practice, such as good ventilation or masking can reduce the risk.**

**The health risk from inhalation of dust particle varies, depending on the type of particles, the particle concentration, exposure length. There is small percentage of impurities in the substance. The particles from the impurity have different risk level. Check related information and regulation to address the risk.**

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