SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Black Silicon Carbide Grain

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the Safety Data Sheet
Supplier:
Composition Materials Co., Inc.
249 Pepes Farm Road
Milford, CT 06460
Ph: 203-874-6500  Fax: 203-874-6505

1.4 Emergency telephone number:
Ph: 353-323-3500

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

- health hazard

- Carc. 1A  H350  May cause cancer.

Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the Globally Harmonized System within the United States (GHS).
The product is classified and labelled according to the CLP regulation.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
OSHA GHS

Black Silicon Carbide Grain

- Hazard pictograms
  - GHS08

- Signal word Danger

- Hazard-determining components of labelling:
  - Quartz (SiO2)

- Hazard statements
  - H350 May cause cancer.

- Precautionary statements
  - P281 Use personal protective equipment as required.
  - P202 Do not handle until all safety precautions have been read and understood.
  - P308\+P313 IF exposed or concerned: Get medical advice/attention.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Additional information:
  - Restricted to professional users.

- Hazard description:
  - WHMIS-symbols:
    - D2A - Very toxic material causing other toxic effects

- NFPA ratings (scale 0 - 4)
  - Health = 0
  - Fire = 0
  - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - Health = *0
  - Fire = 0
  - Reactivity = 0

  * - Indicates a long term health hazard from repeated or prolonged exposures.

<table>
<thead>
<tr>
<th>HMIS Long Term Health Hazard Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-80-7</td>
</tr>
</tbody>
</table>

- 2.3 Other hazards
  - Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

(Contd. on page 3)
SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
  - Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 409-21-2</td>
<td>silicon carbide</td>
</tr>
<tr>
<td>EINECS: 206-991-8</td>
<td>substance with a Community workplace exposure limit</td>
</tr>
<tr>
<td>CAS: 14808-60-7</td>
<td>Quartz (SiO2)</td>
</tr>
<tr>
<td>EINECS: 238-875-4</td>
<td>Xn R48</td>
</tr>
<tr>
<td></td>
<td>☑ Carc. 1A, H350</td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - General information: No special measures required.
  - After inhalation:
    - Supply fresh air; consult doctor in case of complaints.
    - Provide oxygen treatment if affected person has difficulty breathing.
  - After skin contact:
    - Brush off loose particles from skin.
    - Clean with water and soap.
    - If skin irritation continues, consult a doctor.
  - After eye contact:
    - Immediately remove contact lenses if possible.
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    - Rinse out mouth and then drink plenty of water.
    - Do not induce vomiting; call for medical help immediately.
  - 4.2 Most important symptoms and effects, both acute and delayed
    - Coughing
    - Gastric or intestinal disorders
  - Hazards: Danger of impaired breathing.
  - 4.3 Indication of any immediate medical attention and special treatment needed
    - No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
  - For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
  - Protective equipment:
    - Wear self-contained respiratory protective device.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
OSHA GHS

Black Silicon Carbide Grain

(Contd. of page 3)

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Avoid formation of dust.
  Ensure adequate ventilation
  For large spills, wear protective clothing.
  For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- 6.2 Environmental precautions: No special measures required.
- 6.3 Methods and material for containment and cleaning up:
  Pick up mechanically.
  Send for recovery or disposal in suitable receptacles.
  Dispose contaminated material as waste according to item 13.
- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Prevent formation of dust.
  Any unavoidable deposit of dust must be regularly removed.
  Use only in well ventilated areas.
  Avoid breathing dust.
  Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
  Storage:
  Requirements to be met by storerooms and receptacles: No special requirements.
  Information about storage in one common storage facility: Store away from oxidising agents.
  Further information about storage conditions:
  Store in cool, dry conditions in well sealed receptacles.
  Store receptacle in a well ventilated area.
  Protect from humidity and water.
  This product is hygroscopic.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
  (Contd. on page 5)
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
OSHA GHS

Black Silicon Carbide Grain

8.1 Control parameters

<table>
<thead>
<tr>
<th>409-21-2 silicon carbide</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 15 * 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>fibrous dust: *total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10 * 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 10 * 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>fibrous dust: 0.1 f/cc; nonfibrous: *inh., **resp.</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10 * 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*inhalable, **respirable</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10 * 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>0.1 f/cc; nonfibrous: *inh., **resp., ***fibrous, resp.</td>
</tr>
</tbody>
</table>

14808-60-7 Quartz (SiO2)

| PEL (USA)                        | see Quartz listing |
| REL (USA)                        | Long-term value: 0.05* mg/m³  |
|                                  | *respirable dust; See Pocket Guide App. A |
| TLV (USA)                        | Long-term value: 0.025* mg/m³  |
|                                  | *as respirable fraction |
| EL (Canada)                      | Long-term value: 0.025 mg/m³  |
|                                  | ACGIH A2; IARC 1 |
| EV (Canada)                      | Long-term value: 0.10* mg/m³  |
|                                  | *respirable fraction |

- DNELs No further relevant information available.
- PNECs No further relevant information available.
- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

- Personal protective equipment:
  - General protective and hygienic measures:
    - The usual precautionary measures are to be adhered to when handling chemicals.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes.
    - Avoid close or long term contact with the skin.
    - Do not inhale dust / smoke / mist.
  - Respiratory protection:
    - Suitable respiratory protective device recommended.
    - Use suitable respiratory protective device in case of insufficient ventilation.
    - For spills, respiratory protection may be advisable.
  - Protection of hands:
    - Wear gloves for the protection against mechanical hazards according to NIOSH or EN 388.
    - The glove material has to be impermeable and resistant to the product / the substance / the preparation.

- Material of gloves:
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

(Contd. on page 6)
Black Silicon Carbide Grain

- **Eye protection:**
  - Safety glasses

- **Body protection:**
  - Not required under normal conditions of use.
  - Protection may be required for spills.
  - **Limitation and supervision of exposure into the environment:** No special requirements.
  - **Risk management measures:** No special requirements.

---

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

  - **General Information**
  - **Appearance:**
    - Form: Granulate
    - Colour: Black
    - Odour: Odourless
    - Odour threshold: Not determined.
    - pH-value: Neutral
  - **Change in condition**
    - Melting point/Melting range: Not determined.
    - Boiling point/Boiling range: Undetermined.
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Product is not flammable.
  - **Auto/Self-ignition temperature:** Not determined.
  - **Decomposition temperature:** 4712 °F / 2600 °C (Sublimation)
  - **Self-igniting:** Not determined.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - Lower: Not determined.
    - Upper: Not determined.
  - **Vapour pressure:** Not applicable.
  - **Density at 20 °C:** 3.20 g/cm³
  - **Relative density**
  - **Vapour density** Not determined.
  - **Evaporation rate** Not applicable.
  - **Solubility in / Miscibility with water:** Insoluble.

(Contd. on page 7)
Safety Data Sheet  
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
OSHA GHS

Black Silicon Carbide Grain

(Contd. of page 6)

- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:  
  Dynamic: Not applicable.  
  Kinematic: Not applicable.
- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability  
  Thermal decomposition / conditions to be avoided:  
  No decomposition if used and stored according to specifications.
- 10.3 Possibility of hazardous reactions  
  Reacts with strong acids.  
  Reacts with oxidising agents.  
  Reacts with strong alkali.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects  
  Acute toxicity:  
  Primary irritant effect:  
    on the skin: No irritant effect.  
    on the eye: No irritating effect.  
  Sensitisation: No sensitising effects known.
- 11.2 Additional toxicological information:  
  The product shows the following dangers according to the calculation method of the General EU  
  Classification Guidelines for Preparations as issued in the latest version:  
  Carcinogenic if inhaled.
  Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):  
  Carc. 1A

SECTION 12: Ecological information

- 12.1 Toxicity  
  Aquatic toxicity: Generally not hazardous for water
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential Does not accumulate in organisms.
- 12.4 Mobility in soil No further relevant information available.
Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
OSHA GHS

Black Silicon Carbide Grain

(Contd. of page 7)

- Additional ecological information:
- General notes:
  Negative ecological effects are, according to the current state of knowledge, not expected.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    Smaller quantities can be disposed of with household waste.
    Can be reused after reprocessing.
    Contact waste processors for recycling information.
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - DOT, ADR, ADN, IMDG, IATA
  - Not Regulated
- 14.2 UN proper shipping name
  - DOT, ADR, ADN, IMDG, IATA
  - Not Regulated
- 14.3 Transport hazard class(es)
  - DOT, ADR, ADN, IMDG, IATA
  - Not Regulated
- 14.4 Packing group
  - Not Regulated
- 14.5 Environmental hazards:
  - Marine pollutant:
    - No
- 14.6 Special precautions for user
  - Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.
- UN "Model Regulation": 

(Contd. on page 9)
# Safety Data Sheet
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Black Silicon Carbide Grain

(Contd. of page 8)

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **United States (USA)**
  - **SARA**
    - **Section 355 (extremely hazardous substances):**
      None of the ingredients are listed.
    - **Section 313 (Specific toxic chemical listings):**
      None of the ingredients are listed.
    - **TSCA (Toxic Substances Control Act):**
      All ingredients are listed.
    - **Proposition 65 (California):**
      **Chemicals known to cause cancer:**
      - 14808-80-7 Quartz (SiO2)
      **Chemicals known to cause reproductive toxicity for females:**
      None of the ingredients are listed.
      **Chemicals known to cause reproductive toxicity for males:**
      None of the ingredients are listed.
      **Chemicals known to cause developmental toxicity:**
      None of the ingredients are listed.
    - **EPA (Environmental Protection Agency)**
      None of the ingredients are listed.
    - **IARC (International Agency for Research on Cancer)**
      - 14808-80-7 Quartz (SiO2)
    - **TLV (Threshold Limit Value established by ACGIH)**
      - 409-21-2 silicon carbide
      - 14808-80-7 Quartz (SiO2)
    - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
      - 14808-80-7 Quartz (SiO2)
    - **Canada**
      - **Canadian Domestic Substances List (DSL)**
        All ingredients are listed.
      - **Canadian Ingredient Disclosure list (limit 0.1%)**
        None of the ingredients are listed.
      - **Canadian Ingredient Disclosure list (limit 1%)**
        None of the ingredients are listed.

(Contd. on page 10)
Black Silicon Carbide Grain

(Contd. of page 9)

- **Other regulations, limitations and prohibitive regulations**
  This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

<table>
<thead>
<tr>
<th>Substances of very high concern (SVHC) according to REACH, Article 57</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

---

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - **H350** May cause cancer.
  - **R48** Danger of serious damage to health by prolonged exposure.
  - **R49** May cause cancer by inhalation.

**Abbreviations and acronyms:**
- **ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- **IMDG:** International Maritime Code for Dangerous Goods
- **IATA:** International Air Transport Association
- **GHS:** Globally Harmonised System of Classification and Labelling of Chemicals
- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **EINECS:** European Inventory of Existing Commercial Chemical Substances
- **ELINCS:** European List of Notified Chemical Substances
- **CAS:** Chemical Abstracts Service (division of the American Chemical Society)
- **NFPA:** National Fire Protection Association (USA)
- **HMIS:** Hazardous Materials Identification System (USA)
- **WHMIS:** Workplace Hazardous Materials Information System (Canada)
- **DNEL:** Derived No-Effect Level (REACH)
- **PNEC:** Predicted No-Effect Concentration (REACH)
- **Carc. 1A:** Carcinogenicity, Hazard Category 1A

- **Sources**
  - SDS Prepared by:
    ChemTel Inc.
    1305 North Florida Avenue
    Tampa, Florida USA 33602-2902
    Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  - Website: www.chemtelinc.com