

SAFETY DATA SHEET

1.0 IDENTIFICATION

- 1.1 GHS product identifier:** N-60 and N-61 Filler
- 1.2 Other means of identification:** Silicon Carbide Powder
- 1.3 Recommended use of the chemical and restrictions on use:** N/A
- 1.4 Supplier's details:** BPI INC
612 S TRENTON AVE
PITTSBURGH PA 15221 USA
INFORMATION PHONE NUMBER: (248) 588-2270
- 1.5 Emergency phone number:** (703) 527-3887(Call Collect)

2.0 HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
N/A
- 2.2 GHS label elements:**
N/A
- 2.3 Other hazards which do not result in classification:** N/A
- 2.4 Hazards Material Information System (United States):**

| | |
|-----------------|---|
| Health | 0 |
| Flammability | 0 |
| Physical Hazard | 0 |

Hazard Codes: *=Chronic Hazard 0=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 |
|---|------------|---------------|
| Silicon Carbide | 409-21-2 | 75-100 |
| Silicon Dioxide, Amorphous, Fused, (SiO ₂) | 60676-86-0 | <3 |
| Silicon Dioxide, Crystalline, Quartz, (SiO ₂) | 14808-60-7 | <1 |
| Carbon, Graphite (Natural) | 7782-42-5 | <3 |
| Iron Oxide, Ferric Oxide, (Fe ₂ O ₃) | 1309-37-1 | <3 |
| Alumina, (Al ₂ O ₃) | 1344-28-1 | <2 |

4.0 FIRST-AID MEASURES

4.1 Description of necessary first-aid measures:

Ingestion: If victim is conscious, give 1-3 glasses of water or milk to dilute stomach contents. Get medical attention if irritation persists.

Skin Contact: Wash area of contact thoroughly with soap and water. Get medical attention if irritation persists.

Eye Contact: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.

Inhalation: Remove affected person from source of exposure. Get medical attention if irritation persists.

4.2 Most Important symptoms/effects, acute and delayed:

Ingestion: Not intended for ingestion, however if ingested may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting and diarrhea.

Skin Contact: Slightly irritating. Abrasive action may cause cuts and abrasions.

Eye Contact: Slightly irritating. Abrasive action may cause damage to the outer surface of the eye.

Inhalation: Dusts may cause respiratory tract irritation. Repeated or prolonged breathing of particles of respirable size may cause severe respiratory disease. Effects may include inflammation of the lung, chest pain, difficult breathing, coughing and possible fibrotic change in the lung --- "Pneumonconiosis". Pre-existing medical conditions may be aggravated by exposure; specifically, bronchial hyper-reactivity and chronic bronchial or lung disease.

Special Toxic Effects: This product contains crystalline silica. IARC has determined that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and there is limited evidence for the carcinogenicity of crystalline silica to humans. This product contains amorphous silica. IARC has determined that there is inadequate evidence for the carcinogenicity of amorphous silica to experimental animals and humans. See section 8-EXPOSURE CONTROLS/PERSONAL PROTECTION for exposure limits and recommended protective equipment. See section 11-TOXICOLOGICAL INFORMATION for any further information.

4.3 Indication of immediate medical attention and special treatment needed, if necessary: N/A**5.0 FIRE-FIGHTING MEASURES****5.1 Suitable extinguishing media:**

Use extinguishing agent suitable for type of surrounding fire.

5.2 Specific hazards arising from the chemical:

Flash point: None. Dusts may form explosive mixture in air.

5.3 Special protective actions for fire-fighters:

None

6.0 ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:**

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

6.2 Methods and materials for containment and clean up:

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7.0 HANDLING AND STORAGE**7.1 Precautions for safe handling:**

User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed. Store in a cool dry place.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

| Component | CAS No. | Percent | Exposure Limits | Source |
|---|------------|---------|--|---------------|
| Silicon Carbide | 409-21-2 | 75-100 | 10 mg/m ³ TWA 15 mg/m ³ PEL, 8 hr | ACGIH OSHA |
| Silicon Dioxide, Amorphous, Fused, (SiO ₂) | 60676-86-0 | <3 | 3 mg/m ³ TWA 80 mg/m ³ PEL, 8 hr | ACGIH OSHA |
| Silicon Dioxide, Crystalline, Quartz, (SiO ₂) | 14808-60-7 | <1 | 0.05 mg/m ³ TWA 30 mg/m ³ PEL, 8 hr | ACGIH OSHA |

8.2 Appropriate engineering controls:

Ensure adequate ventilation to prevent accumulation of process dusts.

8.3 Individual protection measures, such as personal protective equipment:

Eye protection: Safety glasses with side shields or goggles are always recommended

Hand protection: Gloves suitable for blocking harmful dusts may be required

Respiratory protection: A dust respirator rated as ANSI N95 compliant is recommended for applications that may liberate aluminum dusts or wherever adequate ventilation is not present.

Protective clothing: No unusual protective clothing required

Work and hygienic practices: Wash hands after shift and before using the toilet, eating or smoking.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance (physical state, color, etc.): Various sizes; Coarse to Fines; Granular; Crystalline, black or green

9.2 Odor: None

9.3 Odor threshold: N/A

9.4 pH: N/A

9.5 Melting point/freezing point: Melting range: 3600°F - 7200°F

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: N/A

9.12 Vapor Density: N/A

9.13 Relative density (specific gravity): 3.00-3.20

9.14 Solubility(ies): Insoluble

9.15 Partition coefficient; n-octanol/water: N/A

- 9.16 Auto-ignition temperature: N/A
- 9.17 Decomposition temperature: N/A
- 9.18 Viscosity: N/A

10.0 STABILITY AND REACTIVITY

- 10.1 Reactivity: N/A
- 10.2 Chemical stability: Stable under normal conditions of use
- 10.3 Possibility of hazardous reactions: Will not occur
- 10.4 Conditions to avoid: N/A
- 10.5 Incompatible materials: None
- 10.6 Hazardous decomposition products: None

11.0 TOXICOLOGICAL INFORMATION

- 11.1 Likely routes of exposure: Skin, Eye, Inhalation, Ingestion
- 11.2 Symptoms related to the physical, chemical and toxicological characteristics:
 - Skin Contact: May cause skin irritation
 - Skin Absorption: May be harmful if absorbed through the skin
 - Eye Contact: May cause eye irritation
 - Inhalation: Material may be irritating to mucous membranes and upper respiratory tract and may be harmful if inhaled
 - Ingestion: May be harmful if swallowed
- 11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

This product contains crystalline silica. IARC has determined that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and there is limited evidence for the carcinogenicity of crystalline silica to humans. This product contains amorphous silica. IARC has determined that there is inadequate evidence for the carcinogenicity of amorphous silica to experimental animals and humans.
- 11.4 Numerical measures of toxicity:

N/A

12.0 ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity:

No information available.
- 12.2 Persistence and degradability:

This material contains substances that show little to no evidence of biodegradability. Great care should be taken to prevent its release into the environment.
- 12.3 Bioaccumulative potential: N/A
- 12.4 Mobility in soil: N/A
- 12.5 Other adverse effects: N/A

13.0 DISPOSAL CONSIDERATIONS

- 13.1 Disposal methods:

This material may be safely land filled. Check local disposal regulations.

14.0 TRANSPORT INFORMATION

- 14.1 UN number: Not Regulated
- 14.2 UN proper shipping name: Ceramic Granules (Not Regulated)
- 14.3 Transport hazard class(es): Not Regulated
- 14.4 Packing group, if applicable: Not Regulated
- 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:
 - TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All Substances Listed
 - OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)

Irritant
 - EPA SARA Title III Section 312 (40CFR370) hazard class
Immediate (acute)

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minimis" level are

None

CALIFORNIA PROPOSITION 65: known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Water and Toxic Enforcement Act of 1986") This material contains no materials known by the State of California to cause Cancer or reproductive harm.

CANADA REGULATIONS

DSL INVENTORY: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List.

All listed

WHIMS HAZARD CLASSIFICATION: None

16.0 OTHER INFORMATION

16.1 Date of Preparation: 08/29/2011

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.