

# MATERIAL SAFETY DATA SHEET

Company Name: Superior Stone Products, Inc.  
**Product Name:** Superior Black Knife Grade  
Issue Date: 12/08/05  
Revision Date: 11/29/07  
MSDS Number: SUP-90060



## Section I – Chemical Product and Company Identification

**Product Identifier:** Superior Black Knife Grade  
**Product Description:** Polyester Adhesive and Filler  
**Product Code:** 90060  
**Chemical Family:** Polyester

### Manufacturer:

Superior Stone Products, Inc.  
8580 Byron Commerce Drive  
Byron Center, MI 49315  
616-583-0171

**24 Hour Emergency Telephone Number:**  
**CHEMTREC 800-424-9300**

## Section II – Composition/Information on Ingredients

If present, IARC, NTP and OSHA carcinogens and chemicals subject to the reporting requirements of SARA title III Section 313 are identified in this Section.

<u>Ingredient</u>	<u>% (By Weight)</u>	<u>CAS#</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polyester Resin	35-40%	N/A	Not Established	Not Established
Styrene	15-20%	100-42-5	100 ppm 200 ppm (Ceiling) 600 ppm (5 min for any 3 hrs. Peak)	20 ppm 40 ppm (STEL)
Calcium Carbonate	35-40%	1317-65-3	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total )*	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total)*
Black Iron Dioxide	<5%	1317-61-9	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total )*	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total)*
Amorphous Fumed Silica	<5%	112945-52-5	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total )*	5 mg/m <sup>3</sup> (Respirable)* 15 mg/m <sup>3</sup> (Total)*

\* Particulates Not Otherwise Regulated

## Section III – Hazards Identification

**Ingestion:** May cause gastrointestinal disturbances, pain and discomfort.

**Skin:** Prolonged or frequent contact may cause defatting and dryness of the skin with resultant irritation and possible dermatitis. Styrene may be absorbed through the skin in toxic amounts.

**Inhalation:** Vapors may cause mucous membrane irritation and upper respiratory discomfort. High concentrations may result in headache, nausea, insensibility and other central nervous system effects. Repeated exposure to high concentrations may cause liver and kidney damage.

**Eye:** May cause irritation. Liquid splashes may result in more serious injuries. May cause lachrymation (tears).

### HMIS Codes:

Fire: 3  
Health: 2  
Reactivity: 1  
Personal Protection Index: X

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## Section IV – First Aid Measures

**If Swallowed:** DO NOT INDUCE VOMITING (aspiration hazard). Seek immediate medical aid.

**Skin Contact:** Remove contaminated clothing. Wash with soap and water. Consult a physician if any signs or symptoms described in this document occur. Wash contaminated clothing.

**If Inhaled:** Remove victim from exposure. If victim is unconscious, administer artificial respiration and/or oxygen as needed. Seek medical aid.

**Eyes:** Flush with copious amounts of water for 15 minutes. Seek immediate medical aid.

**Note to Physicians:** Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

## Section V - Fire Fighting Measures

### Caution: Flammable Liquid

Flammable Class: 1C

Flash Point: 89°F

Auto Ignition: 490°C

UEL: 1.1%

LEL: 6.1%

**Extinguishing Agents:** Water Spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

**Special Fire Fighting Procedures:** Firefighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly decontaminated after use.

**Unusual Fire And Explosion Hazards:** At elevated temperatures, such as in a fire, polymerization may take place. If polymerization takes place in a closed container, there is the possibility of violent rupture of the container. Product vapors may form an explosive mixture in air.

## Section VI - Accidental Release Measures

**Procedure For Cleanup:** Remove all sources of ignition. Ventilate area. Absorb spill with an absorbent material such as sawdust, vermiculite or sand and place in a closed container. If large spill, dike the area to prevent this material from entering water systems or sewers. Dispose of hazardous waste only in a certified facility for hazardous waste handling in accordance with federal, state, and local regulations.

Call CHEMTREC Emergency Phone Number (24 hour): 800-424-9300

## Section VII - Handling and Storage

Read and observe all precautions on product label. Refer to product label or manufacturers technical bulletins for the proper use and handling of this material. Do not use or store near flame, sparks or hot surfaces. Use only in well ventilated area. Keep container closed. Do not weld, heat or drill container. Emptied container may still contain hazardous or explosive vapor or liquid.

Do not store in temperatures greater than 100°F

Shelf Life: One (1) year when stored at room temperatures.

## Section VIII - Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

**Respiratory Protection:** If a TLV or PEL listed in this data sheet is exceeded, then suitable respiratory protection must be worn to prevent overexposure. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or

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canister may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited.

**Protective Clothing:** Wear appropriate clothing and impervious gloves to prevent skin contact.

**Eye Protection:** Wear safety glasses, face shield or chemical goggles.

**Other Use Precautions:** Eye wash station and safety shower should be available for use in emergency situations.

## Section IX – Physical and Chemical Properties

**Physical State:** Liquid  
**Specific Gravity:** 1.146 (water = 1)  
**Vapor Pressure:** 4.5 mmHg at 68°F  
**Odor:** Styrene  
**VOC Content:** 149 - 199 g/l

## Section X - Stability and Reactivity

**Stability:** Material is stable

**Hazardous Polymerization:** Yes

**Incompatibility (materials to avoid):** Strong acids and oxidizing agents

**Hazardous Decomposition:** Heating of this material to decomposition may cause the emission of irritating, acrid fumes.

**Conditions to avoid:** Heat and direct sunlight

## Section XI - Toxicological Information

**Ingestion:** For Styrene - The oral LD50 in rats is 5g/kg

**Inhalation:** For Styrene - The 4-hour inhalation LC50 in rats is about 26 mg/l

**Carcinogenicity:** The International Agency for Research on Cancer (IARC) has classified styrene as possibly carcinogenic to humans (class 2B). The IARC 2B classification is not based on significant new evidence that styrene might be a carcinogen, but on a revised IARC classification scheme and new data on styrene oxide. The Styrene Information and Research Center does not agree with the reclassification and has published the following statement: "Recently published studies tracing 50,000 workers exposed to high occupational levels of styrene over a period of 45 years showed no association between styrene and cancer, no increase in cancer among styrene workers (as opposed to the average among all workers), and no increase in mortality related to styrene."

## Section XII - Ecological Information

**Ecotoxicological Information:** This material is toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

## Section XIII - Disposal Considerations

This material has been tested and found to have a flash point below 140°F. If discarded, this material and containers should be treated as hazardous wastes (unless fully polymerized) based on the characteristic of ignitability as defined under the federal RCRA regulations (40 CFR 261). Disposal of this material and its container, requires compliance with applicable labeling, packaging, and record keeping standards. Extreme care should be taken to ensure that it is disposed

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of only in a facility permitted for disposal of hazardous wastes. Dispose of container and unused contents in accordance with federal, provincial, state and local requirements. For further information, contact your provincial, state or local solid waste agency or the United States Environmental Protection Agency's RCRA hotline (800-424-9346).

## Section XIV - Transportation Information

### DOT (DEPARTMENT OF TRANSPORTATION)

Technical Name: Resin Solution  
Hazard Class: 3  
NA/UN Number: 1866  
Packing Group: III

## Section XV - Regulatory Information

### Federal Regulations:

#### Sara Title III - Section 311

Immediate (Acute) Health Effects:	Yes
Chronic (Delayed) Health Effects:	Yes
Fire Hazzard:	Yes
Sudden Release of Pressure Hazard:	No
Reactivity:	Yes

#### Sara Title III - Section 313

Styrene monomer (100-42-5)

### State Regulations:

Proposition 65 Statement: Styrene is NOT currently listed as a carcinogen by California's Safe Drinking Water and Toxic Enforcement Act of 1986.

Styrene, in the presence of air and high temperature or prolonged exposure to styrene/air mixture to sunlight, can react to form styrene oxide. Styrene oxide is a chemical known to the state of California to cause cancer.

Comments: SCAQMD Rule 1162 establishes specific process, control, housekeeping, and recordkeeping requirements for fabrication operations using polyester resin materials. It is the responsibility of the fabricator to ensure compliance with these requirements.

### Canada:

Canadian WHMIS Classification: B2, D2A, D2B

## Section XVI - Other Information

**MANUFACTURER DISCLAIMER:** This information is provided in good faith and is correct to the best of Superior Stone Products' knowledge as of the date hereof; however, Superior Stone Products makes no representation as to its completeness or accuracy. Customers are encouraged to make their own determination as to the suitability of this product for their purpose prior to use. Superior Stone Products disclaims responsibility to damages of any kind resulting from the use of this information. THERE ARE NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT IT DESCRIBES.