

# MATERIAL SAFETY DATA SHEET

Company Name: Superior Stone Products, Inc.  
Product Name: **Superior Limestone Knife Grade**  
Issue Date: 1/01/04  
MSDS Number: SUP-90090



## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Superior Limestone Knife Grade  
Product Description: Polyester Adhesive & Filler  
Product Code: 90090  
Chemical Family: Polyester

MANUFACTURER:  
Superior Stone Products, Inc.  
8580 Byron Commerce Drive  
Byron Center, MI 49315  
Customer Service: 800-493-5111

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

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

	<u>% by Weight</u>	<u>CAS Registry Number</u>
Polyester Resin	35 - 40	N/A
Styrene	15 - 20	100-42-5
Calcium Carbonate	35 - 40	1317-65-3
Titanium Dioxide	<5	13463-67-7
Yellow Iron Oxide	<5	51274-00-1
Black Iron Oxide	<5	1317-61-9
Amorphous Fumed Silica	<5	112945-52-5

### OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

	EXPOSURE LIMITS		<u>Supplier</u>
	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	
Styrene	50 ppm	50 ppm	
Calcium Carbonate	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
Titanium Dioxide	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
Yellow Iron Oxide		5 mg/m <sup>3</sup>	
Black Iron Oxide	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	
Amorphous Fumed Silica		10 mg/m <sup>3</sup>	

## 3. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

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

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INGESTION: May cause gastrointestinal disturbances, pain and discomfort.

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.

ROUTES OF ENTRY: Ingestion, inhalation and skin absorption.

## 4. FIRST AID MEASURES

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

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

INGESTION: DO NOT INDUCE VOMITING (aspiration hazard). Seek immediate medical aid.

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

NOTES TO PHYSICIAN: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

## 5. FIRE FIGHTING MEASURES

Flashpoint and Method: 89F

Flammable Limits: 1.1 to 6.1

Autoignition Temperature: 490C

FLAMMABLE CLASS: 1C

EXTINGUISHING MEDIA: Water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

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.

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.

## 6. ACCIDENTAL RELEASE MEASURES

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

RELEASE NOTES: 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.

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## 7. HANDLING AND STORAGE

GENERAL PROCEDURES: 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 still contains hazardous or explosive vapor or liquid.

Storage Temperature: 100F maximum

SHELF LIFE: One (1) year when stored at room temperatures.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

### PERSONAL PROTECTION

EYES AND FACE: Wear safety glasses, face shield or chemical goggles.

SKIN: Wear appropriate impervious gloves to prevent skin contact.

RESPIRATORY: 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 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 protective clothing to prevent skin contact.

OTHER USE PRECAUTIONS: Eye wash station and safety shower should be available for emergency situations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Percent Volatile: 15-20

Vapor Pressure: 4.5 mmHg at 68F

Boiling Point: 295F

Specific Gravity: 1.146 (water=1)

(VOC): 15 to 20

## 10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: Yes

CONDITIONS TO AVOID: Heat and direct sunlight.

HAZARDOUS DECOMPOSITION: Heating of this material to decomposition may cause the emission of irritating, acrid fumes.

INCOMPATIBLE MATERIALS: Strong acids and oxidizing agents.

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## 11. TOXICOLOGICAL INFORMATION

### ACUTE

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/liter.

### CARCINOGENICITY

IARC: 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."

## 12. 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.

## 13. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL: This material has been tested and found to have a flash point below 140 degF. 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 of only in a facility permitted for disposal of hazardous wastes. For further information, contact your state or local solid waste agency or the United States Environmental Protection Agency's RCRA hotline (800-424-9346).

## 14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

Technical Name: Resin Solution

Hazard Class: 3

NA/UN Number: 1866

Packing Group: III

## 15. REGULATORY INFORMATION

### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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Fire: Yes    Reactivity: Yes    Acute: Yes    Chronic: Yes

313 Reportable Ingredients: The following ingredients in this material are subject to the reporting requirements of Section 313 of SARA and 40 CFR 372: Styrene monomer (100-42-5)

## **CANADA**

Canadian WHMIS Classification: B2, D2A, D2B

## **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.

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.

## **16. OTHER INFORMATION**

### HMIS CODES

Fire: 3    Health: 2    Reactivity: 1

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.