SAFETY DATA SHEET

Company Name: Superior Stone Products, Inc.
Product Name: Superior Acrylics Quick Set Knife Grade
Issue Date: 1/1/04
Revision Date: 6/1/15
SDS Number: 200-15010

Section I –Product and Company Identification

Product Identifier: Superior Acrylics Quick Set Knife Grade
Product Description/Use: Acrylic Adhesive and Filler
Product Code: 15010
Chemical Family: Acrylic

Company:

Superior Stone Products, Inc.
8580 Byron Commerce Drive
Byron Center, MI 49315
Phone: (616) 583-0176

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

Section II – Hazards Identification

GHS Hazard Classification(s):

Flammable Liquid: Category 2
Skin Irritation: Category 2
Skin Sensitization: Category 1B
Specific Target Organ Systemic Toxicity - Single Exposure: Category 3, Respiratory Tract Irritation



Symbols:

Signal Word(s): Danger

Hazard Statements:

H225: Highly Flammable liquid and vapor.
H315: Causes skin irritation.
H335: May cause respiratory irritation.
H317: May cause allergic skin reaction.
H402: Harmful to aquatic life.

Precautionary Statements:

P201: Obtain special instruction before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking.
P233: Keep container tightly closed.
P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P243: Take precautionary measures against static discharge.
P261: Avoid breathing fumes.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the work area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Hazards not otherwise classified: Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

Section III – Composition/Information on Ingredients

Substance/Mixture: Mixture

Ingredient	Synonym(s)	% (By Weight)	CAS#	EINECS Nc.
Methyl Methacrylate	Methylacrylate Monomer, Methyl Ester fo Methacrylic Acid, Methyl-2-methyl-2-propenoate	60-80%	80-62-6	201-297-1
Poly (Methyl Methacrylate/Ethyl Acrylate)	Methyl Methacrylate Resin, Methyl Methacrylate Polymer, Polymethyl Methacrylate Beads	10-5%	9010-88-2	N/A
Triethylene Glycol Dimehtacrylate Esters	TEDMA, TEGDMA	1-10%	109-16-0	203-652-6
Hydrophobic Amorphous Fumed Silica	Hydrophobized Dispersed Silica, Synthetic Silica, X-ray Amorphous Silicon Dioxide	5-15%	67762-90-7	N/A

Section IV – First Aid Measures

If Swallowed: Only induce vomiting if directed by a physician. 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.

Section V - Fire Fighting Measures

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or any Class B extinguishing agent.
Unsuitable Extinguishing Media: Water.
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.
Hazardous Products of Combustion: Decomposition products may include the following material: carbon oxides, nitrogen oxides.
Other Remarks: Liquid and vapor may cause flash fire or ignite explosively. Vapor is heavier than air and may settle in low places or spread long distances to a source of ignition and flashback. Explosive atmospheres may linger. Closed containers can rupture and release toxic vapors or decomposition products.

Section VI - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures
For Non-Emergency Personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Provide adequate ventilation.
For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See also the information for non-emergency personnel.
Methods and Materials for Containment and Cleaning Up
Small Spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section VII - Handling and Storage

Precautions for Safe Handling

Protective Measures: Put on appropriate personal protection equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not breath vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined space unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible materials, kept tightly closed when not in use. Store and use away from heat, sparks open flame or any other ignition source. Use explosion-roof electrical (ventilating, lighting and material handling) equipment. Use only on-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and con be hazardous. Do no reuse container.

Advice on General Occupational Health: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage, Including and Incompatibles: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Segregate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do no store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Refer to the product label and/or technical data sheet for further information.

Do not store in temperatures greater than 100^{o}F.

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

Section VIII - Exposure Controls/Personal Protection

Likely Routes of Exposure: Inhalation, Dermal, Ingestion.

Control Parameters

Occupational exposure Limits:

Ingredient Name	Exposure Limits
Methyl Methacrylate	**ACGIH TLV (United States)** TWA: 50 ppm - 8 hours TWA: 205 mg/m^3 - 8 hours STEL: 100 ppm - 8 hours STEL: 410 mg/m^3 - 8 hours **OSHA PEL (United States)** TWA: 100 ppm - 8 hours TWA: 410 mg/m^3 - 8 hours

Engineering Controls: Use only with adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard. Engineering controls also need to keep gas vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental Exposure Controls: Emissions from ventilation of work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. .

Individual Protection Measures
Hygiene Measures: Wash Hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gasses or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory Protection: Use a properly fitted, air-purifying of air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section IX – Physical and Chemical Properties

Physical State: Paste
Color: Clear
Odor: Sweet, acrid.
Odor Threshold: 0.05 ppm
pH: Not Available
Melting Point: -54°F/-48°C (Methyl Methacrylate)
Boiling Point: 212°F/100°C (Methyl Methacrylate)
Flash Point: 64°F/17.7°C (Methyl Methacrylate)
Burning Time: Not Applicable
Burning Rate: Not Applicable
Evaporation Rate: 3.1 (Butyl acetate) = 1)
Flammability (solid, gas): Not Available
Lower and Upper Explosive (Flammable) Limits: Lower: 2.1%
Upper: 12.5%
Vapor Pressure: 29 mm Hg @ 68°F/20°C (Methyl Methacrylate)
Vapor Density: 3.5 (Air = 1) (Methyl Methacrylate)
Relative Density: 0.94 (Water = 1)

Solubility: Insoluble
Partition Coefficient: n-Octanol/water : Not Available
Auto-Ignition temperature: 790°F/421°C
Decomposition Temperature: Not Available
SADT: Not Available
Viscosity: Not Available.
VOC Content: 550 - 733 g/l (as supplied)
<50 g/l (as applied)

Section X - Stability and Reactivity

Reactivity: Product is stable under normal storage conditions.
Chemical Stability: Material is stable
Hazardous Polymerization: Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides) reducing substances, and/or heavy metal ions. The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.
Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatibility (materials to avoid): Free radical initiators, reducing agents, tertiary amines, heavy metals, peroxides, oxidizing agents, and mineral acids.
Hazardous Decomposition: Heating of this material to decomposition may cause fumes containing organic acids, carbon dioxide and carbon monoxide.

Section XI - Toxicological Information

Acute Toxicity:

Product/Ingredient Name	Result	Species	Dose	Exposure
Methyl Methacrylate	LC50 Inhalation	Rat	29.8 mg/l	4 hours
	LD50 Oral	Rat	>5,000 mg/kg	-
	LD50 Dermal	Rabbit	>5,000 mg/kg	-

Irritation/Corrosion:

Product/Ingredient Name	Result	Species
Methyl Methacrylate	Not irritating - slightly irritating	Rabbit

Sensitization:

Product/Ingredient Name	Result	Species
Methyl Methacrylate	Sensitizing	Mouse, LLNA (Local Lymph Node Assay) In humans various types of allergic reactions have been observed (symptoms: headache, eye irritations skin affections).

Mutagenicity: Not available
Carcinogenicity:
Classification:

Product/Ingredient Name	OSHA	IARC	NTP
Methyl Methacrylate	No Component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA	3	No Component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

Reproductive Toxicity: Not available

Teratogenicity: Not available
Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.
Specific Target Organ Toxicity (Repeated Exposure): Not available
Aspiration Hazard: Not available
Likely Routes of Exposure: Inhalation, Dermal, Ingestion.

Section XII - Ecological Information

Toxicity:

Product/Ingredient Name	Result	Species	Exposure
Methyl Methacrylate	EC50 170 µg/l Fresh Water	Algae - Pseudokirchneriella subcapitata	96 hours
	EC50 720 µg/l Fresh Water	Daphnia - Daphnia magna	-
	LC50 125.5-275.0 µg/l Fresh Water	Fish - Pimephales promelas	96 hours

Persistence and Degradability: Not Available
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.

Section XIII - Disposal Considerations

The information in this section contains generic advice and guidance. The list of identified uses in Section 1 should be consulted for any available use-specific information.
Disposal Methods: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. Disposal of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid disposal. Attempt to use product completely in accordance with intended use. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is no feasible.

Special Precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Do no cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soul, water ways, drains and sewers.

Section XIV - Transportation Information

DOT (DEPARTMENT OF TRANSPORTATION)
Technical Name: Resin Solution
Hazard Class: 3
NA/UN Number: 1866
Packing Group: II
Marine Pollutant: No
Please refer to DOT regulations for more info

Canada (TDG)
Technical Name: Resin Solution
Hazard Class: 3
NA/UN Number: 1866
Packing Group: II

Please refer to TDG Regulations for more info

International Air Transport Association (IATA)
Technical Name: Resin Solution
Hazard Class: 3
NA/UN Number: 1866
Packing Group: II
ERG Code: 3L
Marine Pollutant: No
Please refer to IATA regulations for more info.

International Maratime Organization (IMO)
Technical Name: Resin Solution
Hazard Class: 3
NA/UN Number: 1866
Packing Group: II
EmS: F-E, S-E
Marine Pollutant: No
Please refer to IMO regulations for more info.

Special Precautions for User: Transport within users premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the products know what to do in the event of an accident or spillage.

Section XV - Regulatory Information

United States Federal Regulations:

Sara Title III - Section 311/312

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

Sara Title III - Section 313

Criteria	Product/Ingredient Name	CAS Number	%
Form R - Reporting Requirements	Methyl Methacrylate	80-62-6	25-30%
Supplier Notification	Methyl Methacrylate	80-62-6	25-30%

State Regulations:
Massachusetts Right to Know: The following components are listed: Methyl Methacrylate (CAS # 80-62-6)
Pennsylvania Right to Know: The following components are listed: Methyl Methacrylate (CAS # 80-62-6)
New Jersey Right to Know: The following components are listed: Methyl Methacrylate (CAS # 80-62-6)
California Prop 65 Statement: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Canada:
Canadian WHMIS Classification: B2, D2B
Ingredient Disclosure List: Methyl Methacrylate (80-62-6)

Section XVI - Other Information

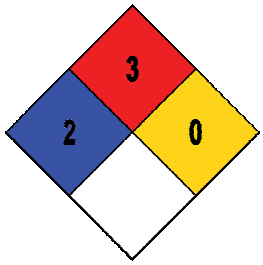
Hazardous Material Information System (United States):

Health	2
Flammability	3
Physical Hazards	0

Caution: HMIS® rating are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating are not required on SDSs under 29 CFR 19101200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (United States):



Flammability

Health

Instability/Reactivity

Special

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