

Safety Data Sheet

Seamless™ Solid Surface Adhesive, Part A

SDS No. 20010.01

Date of Preparation: 7/20/15

Revision: 11/2/15

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Seamless™ Solid Surface Adhesive, Part A

General Use: Bonding agent for acrylic, polyester, and quartz composites, natural stone, FRP/GRP, and steel reinforcing rods.

Manufacturer: Marshall-Gruber Company, LLC

Emergency Phone: (800)424-9300

A subsidiary of The R. J. Marshall Company

Date Revised: 11/2/15

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Section 2 – Hazards Identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200: Hazardous.

GHS Classifications:

Flammable Liquid Category 2

Skin irritation: Category 2

Skin Sensitization: Category 1

STOT SE Category-Respiratory System: Category 3

Signal word: Danger



Symbol:

Hazard statements:

H225: Highly flammable liquid and vapor

H315: Causes skin irritation

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

Precautionary statements:

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.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing mist/vapors/spray.

P264: Wash skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P321: Specific treatments (see supplemental first aid instruction on this label)

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353: IF ON SKIN: (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P403+P233: Store in a well-ventilated place. Keep cool.

P501: Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified: Lachrymator

Section 3 – Composition/Information on Ingredients

Chemical Name	CAS#	EINECS#	Weight %
Methyl Methacrylate	80-62-6	201-297-1	35-50%
Non-hazardous ingredients and ingredients below disclosure requirements	-----	-----	50-65%

Section 4 - First Aid Measures

Description of necessary measures, subdivided according to the different routes of exposure:

General advice: In case of shortness of breath, give oxygen. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep victim under observation. Keep victim warm.

Inhalation: Remove to fresh air. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if needed.

Eye Contact: Flush eyes with water as a precaution.

Skin Contact: Remove contaminated clothing immediately. Wash immediately with plenty of soap and water. Consult a physician if irritation develops and persists. Wash contaminated clothing before using it again.

Ingestion: Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed:
Effects of Short-Term (Acute) Exposure:

Inhalation: May cause irritation of the respiratory tract. Prolonged inhalation may be harmful. Avoid breathing dust/fume/gas/mist/vapors/spray.

Skin Contact: May cause skin irritation. Avoid contact with the skin.

Eye Contact: contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermatitis or aggravate existing skin problems.

Medical Conditions Aggravated by Exposure: Persons susceptible to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

Indication of immediate medical attention and special treatment needed: None.

Section 5 - Fire-Fighting Measures

Suitable Extinguishing Media: Water spray, dry sand, alcohol resistant foam, dry chemical, or carbon dioxide.

Unsuitable Extinguishing Media: Do not use water jet, which may spread fire.

Unusual Fire or Explosion Hazards: Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Avoid ignition sources or excessive temperatures. Container may explode under fire conditions. Spontaneous polymerization may occur with prolonged aging or exposure to light.

Sensitivity to Impact: No

Sensitivity to Static Discharge: Yes

Fire-Fighting Instructions: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. If tank, rail car, or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. In the event of fire, cool tanks with water spray. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

NFPA Hazard Index: Health: 2

Flammability: 3

Reactivity: 0

Section 6 - Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Use personal protective equipment listed below. Avoid breathing vapors, mist or spray. Ensure adequate ventilation. Remove all sources of ignition and heat. Evacuate area. Beware of vapors accumulating to form explosive mixtures with air. Vapors may travel long distances and collect in low-lying areas. Flash backs may occur.

Respiratory Protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. At minimum, use a NIOSH approved organic vapor respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently according to the manufacturer's recommendations. Respirator selection must be done by a qualified person and be based upon a risk assessment of the work activities and exposure levels. Respirators must be fit tested and users must be clean shaven where the respirator seals to face. Exposure must be kept at or below the applicable exposure limits and the maximum use concentration of the respirator must not be exceeded.

Skin protection: Handle with gloves. Gloves must be inspected before use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good industrial practices. Wash and dry hands after use. Wear appropriate chemical resistant clothing.

Gloves and protective clothing may be made from butyl rubber, minimum thickness, 0.3 mm. Breakthrough time is approximately 66 minutes.

Eye and Face Protection: Wear safety glasses with side shields (or goggles).

Footwear: No specific recommendation.

Other: Emergency eye wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

Environmental precautions: Prevent spilled material from entering sewers, storm drains, or other unauthorized treatment drainage systems, and natural waterways. Notify fire authorities and appropriate federal, state, and local agencies.

Methods and materials for containment and cleaning up: Extinguish all flames in the vicinity. Should not be released into the environment. The product is only slightly soluble in water and will spread on the water surface.

Remedial measures: Wash spill area with strong detergent and water solution, rinse with minimal water, if possible.

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Large spills: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor, mist or spray. Flashback is possible over long distances. Containers may explode under fire conditions. Use explosion-proof equipment. Take measures to prevent buildup of static charges.

Do not handle, store, or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.

Do not smoke when handling. All equipment used when handling the product must be grounded. Do not breathe mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Do not use in areas without adequate ventilation. Wear personal protective equipment. When using do not eat or drink. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities: Do not handle or store near an open flame, heat, or other sources or ignition. Keep at temperature not exceeding 120°F (49°C). This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a closed container away from incompatible materials. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep in an area equipped with sprinklers. Use care in handling/storage.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Protective Clothing/Equipment:

Skin protection: Handle with gloves. Gloves must be inspected before use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good industrial practices. Wash and dry hands after use. Wear appropriate chemical resistant clothing.

Gloves and protective clothing may be made from butyl rubber, minimum thickness, 0.3mm. Breakthrough time is approximately 66 minutes.

Eye protection: Wear safety glasses with side shields (or goggles).

Footwear: No specific recommendation.

Respiratory protection: Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. At minimum, use a NIOSH approved organic vapor respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently according to the manufacturer's recommendations. Respirator selection must be done by a qualified person and be based upon a risk assessment of the work activities and exposure levels. Respirators must be fit tested and users must be clean shaven where the respirator seal to face. Exposure must be kept at or below the applicable exposure limits and the maximum use concentration of the respirator must not be exceeded.

Other: Emergency eye wash fountains should be available in vicinity of use. At minimum, an eye lavage kit should be kept on hand.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Methyl Methacrylate	100 ppm 410 mg/m ³	None established	50 ppm 205 mg/m ³	100 ppm 410 mg/m ³

Section 9 - Physical and Chemical Properties

Appearance: clear, transparent liquid, may be tinted

Odor: typical resin

Odor Threshold: not available

pH: not applicable

Freezing/Melting Point: not available

Boiling Point: 213.8°F (101°C)

Flash Point: 48.2°F (9°C) Methyl Methacrylate

Flash Point Method: TCC

Evaporation Rate: not available

Flammability: Flammable

Upper/lower flammability or explosive limits:

Upper: 12.5% (volume/methyl methacrylate)

Lower: 2.12% (volume/methyl methacrylate)

Vapor Pressure: 51 hPa @ 77°F (25°C) (methyl methacrylate)

Vapor Density (Air=1): Heavier than air

Relative Density: 1.06 @ 77°F (25°C) (water =1)

Water Solubility: slightly soluble

Other Solubilities: not available

Partition coefficient: n-octanol/water; Log pow: 1.38 (methyl methacrylate)

Auto-ignition Temperature: not established

Decomposition Temperature: not available

Viscosity: not applicable

Section 10 - Stability and Reactivity

Reactivity: None known.

Chemical Stability: Polymerizes with evolution of heat. Avoid contact with incompatible materials. Stable under normal storage conditions.

Possibility of hazardous reactions: High temperatures, inhibitor depletion, accidental impurities or oxidizers may initiate spontaneous polymerization, generating heat and pressure. Closed containers may rupture during hazardous polymerization. Vapors may form explosive mixtures in air.

Conditions to Avoid: May polymerize on exposure to direct sunlight. Avoid heat, flames, and ignition sources.

Incompatible materials: Oxidizing agents. Peroxides, amines, bases, halogens, or reducing agents.

Hazardous Decomposition Products: No data.

Section 11- Toxicological Information

Information on the likely routes of exposure: Skin, Eye, Inhalation, and Ingestion.

Symptoms related to the physical, chemical, and toxicological characteristics:

Effects of Short-Term (Acute) Exposure:

Inhalation: May cause irritation of the respiratory tract. Prolonged inhalation may be harmful. Avoid breathing mist/vapors/spray.

Skin Contact: May cause skin irritation. Avoid contact with the skin.

Eye Contact: Contact with eyes may cause irritation. Avoid contact with eyes.

Ingestion: Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting. Do not ingest.

Effects of Long-Term (Chronic) Exposure: This product contains ingredients which have been known to cause skin sensitization in some people. Sensitization may occur after prolonged or repeated exposures to this product. Prolonged contact with skin may defat tissue causing dermatitis or aggravate existing skin problems.

Medical Conditions Aggravated by Exposure: Persons susceptible to skin problems may find that the use of this product will cause increased symptoms of existing skin problems.

Delayed and immediate effects and also chronic effects from short and long-term exposure: See above.

Numerical measures of toxicity:

Acute Toxicity:

LD₅₀: 7872 mg/kg (oral/rat)

LC₅₀: 78,000 mg/m³ (inhalation/rat) 4 hr

LD₅₀: >5000 mg/kg (dermal/rabbit)

Skin corrosion/irritation: Components of this mixture may cause skin irritation. H315, Category 2, Warning.

Serious eye damage/eye irritation: Not classifiable.

Respiratory or skin sensitization: Components of this mixture may cause skin sensitization, H317, Category 1, Warning.

Germ Cell Mutagenicity: Not classifiable.

Carcinogenicity: Neither this product nor any of its components are considered carcinogenic by OSHA, IARC, NTP, or ACGIH.

Reproductive toxicity: Not classifiable.

Specific Target Organ Toxicity-Single Exposure: Components of this mixture may cause respiratory irritation, H335, Category 3, Warning.

Specific Target Organ Toxicity-Repeated Exposure: Not classifiable.

Aspiration Hazard: Not classifiable.

Aquatic Toxicity: Not classifiable.

Additional Information: No information available.

Section 12 - Ecological Information

Eco-toxicity:

Toxicity to fish: LC₅₀ Pimephales promelas (fathead minnow), 125.5-275.0 mg/l (96 hr)

Toxicity to daphnia: EC₅₀ Daphia Magna (Water flea), 720 mg/l

Toxicity to algae: EC₅₀ Pseudokirchneriella subcapitata (green algae), 170 mg/l (96 hr)

Persistence and degradability: no data available.

Bio-accumulative potential: information not available

Mobility in soil: information not available

Results of PBT and vPvB assessment: Not conducted

Other adverse effects: None known.

Section 13 - Disposal Considerations

Disposal: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations. Residual vapors may explode on ignition. Do not cut, drill, or weld on or near the container. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulation may differ from federal disposal regulations.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warning even after container is emptied.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

UN Number: UN1133

UN proper shipping name: Adhesives

Transport hazard classes: Class 3

Packaging group: PGIII

Environmental hazards: not regulated

Special precautions for user: None

Transport of Dangerous Goods (TDG and CLR):

UN Number: UN1133

UN proper shipping name: Adhesives

Transport hazard classes: Class 3

Packaging group: PGIII

International Air Transport Association (IATA):

UN Number: UN1133

UN proper shipping name: Adhesives

Transport hazard classes: Class 3

Packaging group: PGIII

International Maritime Organization (IMO):

UN Number: UN1133

UN proper shipping name: Adhesives

Transport hazard classes: Class 3

Packaging group: PGIII

Flash point = 87.8°F (31°C), EmS F-E, S-D, Stowage Category A

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.??): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) not listed

SARA Toxic Chemical Section 313(40 CFR 372.65): Methyl Methacrylate

SARA EHS Section 302(Extremely Hazardous Substance) (40 CFR 355): Not listed

SARA Hazardous Chemical Section 311/312: Acute Health: Yes, Chronic Health: Yes, Fire: Yes

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Meets criteria for a hazardous substance

OSHA Specifically Regulated Substance (29CFR 1910.????)

California Proposition 65: None listed

Inventory Lists: This product or its components are listed on the following inventory lists:

TSCA	Canada
Listed	DSL
Listed	Listed

Section 16 - Other Information

Prepared By: Stephanie Nichols

Revision Notes: updated to SDS format

Product Grades Available from the R. J. Marshall Company (this list may be incomplete):

SS203	SS204	SS209	SS210	SS212	SS215	SS217	SS218	SS220	SS222
SS223	SS224	SS225	SS226	SS227	SS229	SS230	SS245	SS247	SS248
SS251	SS268	SS271	SS272	SS280	SS282	SS291	SS292	SS293	SS294
SS295									

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