Safety Data Sheet

SeamlessTM Solid Surface Adhesive

Date of Preparation: 7/20/15 Revision: 7/20/15

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: SeamlessTM Solid Surface Adhesive

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: 7/20/15 **Preparer:** Stephanie Nichols

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Section 2 – Hazards Identification

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

GHS Classifications-Part A Adhesive:

Flammable Liquid Category 2 Skin irritation: Category 2 Skin Sensitization: Category 1

STOT SE Category-Respiratory System: Category 3

GHS Classifications-Part B Activator:

Organic Peroxides: Type D Eye Irritation: Category 2A Skin irritation: Category 2 Skin Sensitization: Category 1

STOT SE Category-Lungs: Category 3

Signal word-Part A Adhesive: Danger



Symbol-Part A Adhesive:

Hazard statements-Part A Adhesive:

H225: Highly flammable liquid and vapor

H315: Causes skin irritation

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

Precautionary statements-Part A Adhesive:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing dust/fume/gas/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.

SDS No. 20010.00

Hazards not otherwise classified-Part A Adhesive: Lachrymator

Signal word-Part B Activator: Danger



Symbol-Part B Activator:

Hazard statements-Part A Activator:

H242: Heating may cause a fire.

H315: Causes skin irritation

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statements-Part A Adhesive:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep/store away from clothing/combustible materials.

P234: Keep only in original container.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling.

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

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

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

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

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

P305+P351+P358: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

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

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

P337+P313: If eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing.

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

P405: Store locked up.

P410: Protect from sunlight.

P411+P235: Store at temperatures not exceeding 86°F (30°C). Keep cool.

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

Hazards not otherwise classified-Part B Activator: None

Section 3 – Composition/Information on Ingredients

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

Chemical Name	CAS#	EINECS#	Weight %
Dibenzoyl Peroxide	94-36-0	202-327-6	3-7%
Non-hazardous ingredients and ingredients below disclosure requirements			60-100%

Section 4 - First Aid Measures

Part A-Adhesive:

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..

Eve 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.

Part B-Activator:

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

General advice: Take of contaminated clothing and shoes immediately. If you feel unwell, seek medical advice (show the label where possible). 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.

Inhalation: Remove to fresh air. Get medical attention if needed..

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Get medical attention immediately.

Skin Contact: Before washing use a dry brush to remove dust from skin. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. 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.

Most important symptoms/effects, acute and delayed:

Effects of Short-Term (Acute) Exposure:

Inhalation: Inhalation of dusts may cause respiratory irritation. Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Skin Contact: May cause sensitization by 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.

on date 7/20/15 SeamlessTM Solid Surface Adhesive MSDS No. 200 Effects of Long-Term (Chronic) Exposure: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

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

Part A-Adhesive:

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

Part B-Activator:

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

Unsuitable Extinguishing Media: None known.

Unusual Fire or Explosion Hazards: Contact with combustible material may cause fire. May explode from heat or contamination. These substances will accelerate burning when involved in fire. Some will react explosively with hydrocarbons (fuels). Some may decompose explosively when heated or involved in a fire. Runoff may create fire or explosion hazard.

Sensitivity to Impact: Not available

Sensitivity to Static Discharge: Not available

Fire-Fighting Instructions: Firefighters should wear full protective clothing including self-contained breathing apparatus. 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.

Reactivity: 1 NFPA Hazard Index: Health: 3 Special Hazard: OX Flammability: 1

Section 6 - Accidental Release Measures

Part A-Adhesive:

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:** Absorb spill with inert material (e.g. vermiculite, sand, or earth), then place in suitable container. 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.

Part B-Activator:

Personal precautions, protective equipment, and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

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. Where risk assessment shows air-purifying respirators are appropriate, use a full face particulate respirator type N100 (US) or Type PE (EN143) respirator cartridges as a backup to engineering controls.

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.

Eye and Face Protection: Face shield and safety glasses.

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 further leakage or spillage, if safe to do so. 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: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements, or confined areas.

Remedial measures: Wash spill area with strong detergent and water solution, rinse with minimal water, if possible. **Small spills:** Clean surface thoroughly to remove residual contamination. Clean up in accordance with all applicable regulations.

Large spills: Do not get water inside container. Use clean non-sparking tools to collect absorbed material. Avoid the generation of dusts during clean –up. Following product recovery, flush area with water.

Section 7 - Handling and Storage

Part A-Adhesive:

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 dust/fume/gas/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 car in handling/storage.

Part B-Activator:

Precautions for safe handling:

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. Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin. Avoid contact with eyes. Do not get this material on clothing. Do not use in areas without adequate ventilation. When using do not eat or drink. Wash thoroughly after handling. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities: Keep away from heat and sources of ignition. Store in a closed container away from incompatible materials (see Section 10 of the SDS). Use car in handling/storage.

Section 8 - Exposure Controls / Personal Protection

Part A-Adhesive:

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.

	OSI	HA PEL	ACGIH TLV	
Ingredient	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

Part B-Activator:

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.

Eye protection: Face shield and safety glasses.

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. Where risk assessment shows air-purifying respirators are appropriate, use a full face particulate respirator type N100 (US) or Type P3 (EN 143) respirator cartridges as a backup to engineering controls.

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.

	OS	SHA PEL	ACGIH TLV		
Ingredient	TWA	STEL	TWA	STEL	
Dibenzoyl Peroxide	5 mg/m ³	None established	5 mg/m ³	None established	

Section 9 - Physical and Chemical Properties

Part A-Adhesive:

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

Part B-Activator:
Appearance: paste

Odor: faint odor

Odor Threshold: not available

pH: not applicable

Freezing/Melting Point: 32°F (0°C)

Boiling Point: not available **Flash Point:** not available

Flash Point Method: not available Evaporation Rate: not available Flammability: Flammable

Upper/lower flammability or explosive limits: not

available

Vapor Pressure: not available
Vapor Density (Air=1): not available

Relative Density: 1.11 @ $77^{\circ}F$ (25°C) (water =1)

Water Solubility: slightly soluble Other Solubilities: not available

Partition coefficient: n-octanol/water; 3.46 (dibenzoyl

peroxide)

Auto-ignition Temperature: not established **Decomposition Temperature:** not available

Viscosity: not applicable

Section 10 - Stability and Reactivity

Part A-Adhesive:

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.

Part B-Activator: Reactivity: No data.

Chemical Stability: Decomposes on heating. Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available.

Conditions to Avoid: Contact with incompatible materials. Exposure to heat, sparks, or flames.

Incompatible materials: Strong acids. Strong bases, oxidizing agents, amines, alcohols, polymerizing initiators or reducing

agents.

Hazardous Decomposition Products: Oxides of carbon.

Section 11- Toxicological Information

Part A-Adhesive:

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 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.

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)

 LC_{50} : 780000 mg/kg (inhalation/rat) LD_{50} : >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.

Part B-Activator:

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: Inhalation of dusts may cause respiratory irritation. Dusts of this product may cause irritation of the nose, throat, and respiratory tract.

Skin Contact: May cause sensitization by 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: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

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: oral, not determined LC₅₀: inhalation, not determined LD₅₀: dermal, not determined

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

Serious eye damage/eye irritation: Components of this mixture may cause eye irritation, H319, Category 2A, Warning. 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 1, 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

Part A-Adhesive:

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.

Part B-Activator:

Eco-toxicity:

Toxicity to fish: LC_{50} Oryzia latipes (Japanese rice fish), 0.24 mg/l (96 hr) **Toxicity to daphnia:** EC_{50} Daphia Magna (Water flea), 0.07 mg/l (48 hr)

Toxicity to algae: EC₅₀ Selenastrum capricornutum (green algae), 0.07 mg/l (72 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

Part A-Adhesive:

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.

Part B-Activator:

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 save 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 regulations 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):

Part A-Adhesive: 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

Part B-Activator:

UN Number: not regulated

UN proper shipping name: not regulated **Transport hazard classes:** not regulated

Packaging group: not regulated Environmental hazards: not regulated Special precautions for user: None

Transport of Dangerous Goods (TDG and CLR): not regulated **International Air Transport Association (IATA):** not regulated **International Maritime Organization (IMO):** not regulated

Note: This mixture contains dibenzoyl peroxide, CAS 94-36-0. It is exempt from being regulated for transport because it contains less than 35% peroxide and has greater than 65% inert material in the mixture.

Section 15 - Regulatory Information

Part A-Adhesive:

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 (29 CFR 1910.????)

California Proposition 65: None listed

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

TSCA	Canada DSL
Listed	Listed

Part B-Activator:

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): Dibenzoyl Peroxide

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 (29 CFR 1910.????)

California Proposition 65: None listed

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

TSCA	Canada
	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	SS300	SS400							

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