

	SECTION 1 IDENTIFICATION
Product Name	Derbiflash RS 289 Textured Base
Recommended Use	Aggregated PMMA finish resin
Restrictions	For Professional use only
Manufacturer	Performance Roof Systems
Address	4821 Chelsea Avenue Kansas City, MO 64130
Phone Number	(800) 727-9872
Emergency Number	(800) 424-9300 (CHEMTREC)
	SECTION 2 HAZARDS
GHS Classification	Flammable Liquid: Category 2 Skin Irritation: Category 2 Skin Sensitization: Category 1 STOT: Single Exposure: Respiratory Tract Irritation; Category 3
Hazard Pictographs	
Signal Word	DANGER
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	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from open flames - 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 dust/ fume/ gas/ mist/ vapors/ spray. P362 - Take off contaminated clothing and wash before reuse. P264 - Wash hands, forearms and face 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 workplace P273 - Avoid release into the environment P280 - Wear gloves/protective clothing/eye protection/face protection
Response	 P301 + P312 + P330 If swallowed: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P303+P361+P353 - If on skin (or hair), Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340+312 If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

ABBREVIATION KEY



SECTION 2 HAZARDS Response P305+P351+P338 - If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P337 + P313 If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use carbon dioxide (CO2), foam, dry extinguishing powder to extinguish Storage P403+P235 - Store in well-ventilated place. Keep cool P405 - Store locked up. Disposal P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

SECTION 3 COMPOSITION

Chemical Composition

COMPONENT	CAS NUMBER	PERCENT BY WEIGHT
Crystalline Silica*	14808-60-7	45 - 80
2-Ethylhexyl acrylate	103-11-7	10 - 30
Methyl methacrylate	80-62-6	1 - 10
Diisopropanol-P-toluidine	38668-48-3	<1

Note: The above components and their percentages are provided for health and safety purposes, ONLY. This document should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

* Component is not likely to occur above the limits of exposure considering its incorporated into the mixture and/or provided use.

SECTION 4 FIRST AID MEASURES

Eyes	If foreign matter enters eyes, immediately flush with large amounts of potable water for at least 15 minutes or until irritation subsides. Get medical attention if irritation persists.
Skin	Wash with plenty of soap and water. Remove all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention.
Inhalation	Remove affected person from source of exposure. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, give oxygen. Get medical attention.
First-Aid, Ingestion	Immediately call a poison center. Do NOT induce vomiting. Rinse mouth.
Symptoms, Acute & Delayed	Refer to Section 11 - Toxicological Information
Immediate Medical Attention	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials



SECTION 5 FIRE FIGHTING MEASURES		
Fire Hazard	Highly flammable liquid and vapor	
Flash Point	73.4°F (MMA Closed Cup) LEL: N/A UEL: N/A	
Hazardous Products of Combustions	CO, CO $_2$, Nitrogen oxides, hydrocarbons, black smoke and methacrylic acid fumes.	
Extinguishing Media	Universal foam, dry chemical powder, CO2 or sand	
Firefighting instruction	Do not use a heavy water stream. Use of heavy stream of water may spread fire. Use standard procedure for chemical fires. Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be collected and disposed of in accordance with local regulations.	
Explosion Hazard	May form flammable/explosive vapor-air mixture.	
Protection Gear	Do not enter fire area without proper equipment, including respiratory protection.	
	SECTION 6 ACCIDENTAL RELEASE MEASURES	
Personal Precautions	Wear appropriate protective clothing to avoid eye and skin contact. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.	
Environmental Precautions	Avoid release into the environment. Report releases as required by local, state and federal authorities.	
Method and Materials for Containment & Clean Up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Shut off all sources of ignition. Keep people away. Eliminate sources of ignition. Minimize skin contact and avoid breathing vapors. Ventilate confined spaces. Keep product out of sewers and waterways by diking or impounding. Dispose of in an approved facility, <i>see Section 13, Disposal Considerations.</i>	
SECTION 7 HANDLING AND STORAGE		
Handling	Use this product with adequate ventilation. Material is COMBUSTIBLE. Material requires electrical grounding during material transfer process to prevent fire or explosion risk from static accumulation and discharge. All electrical equipment in storage and handling areas should be installed per NFPA requirements. Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. <i>Use personal protective equipment as described</i>	

Storage

in Section 8. Store in a dry, cool and well-ventilated place and away from sources of ignition. Keep containers tightly closed when not in use. DO NOT STORE NEAR HEAT, SPARKS, FLAME, OTHER SOURCES OF IGNITION OR STRONG OXIDIZERS. Keep only in original container.



SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

Ccupational Exposure Linit	15			
COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	NIOSH
Methyl methacrylate	80-62-6	410 mg/m³ TWA	205 mg/m³ TWA 410 mg/m³ (STEL)	410 mg/m³ TWA
Crystalline Silica	14808-60-7	0.1 mg/m³ TWA (Respirable)	0.025 mg/m ³ TWA (Respirable fraction)	0.05 mg/m³ TWA (Respirable dust)
Engineering Measures/ Controls	Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.			
General Industrial Hygiene	Use good industrial hygiene practices in handling this material.			
Environmental Exposure Controls	Follow best practice for site management and disposal of waste.			
PERSONAL PROTECTIVE EQUIPMENT				
Pictographs				
Eyes/Face	Safety glasses with side shields Follow the national guidelines concerning the use of protective eye wear.			
Hand	Protective Gloves Leather or cotton gloves may be worn to prevent skin contact and irritation.			
Skin/Body	Normal work clothing (long sleeved shirts, long pants and smooth bottom work shoes) is recommended.			
Inhalation	Use NIOSH or MSHA approved respiratory protective equipment when airborne exposure limits are exceeded.			

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear
Odor	Strong, solvent-like
Odor Threshold	No data available
pH	No data available
Relative Evaporation Rate	No data available
Boiling Point	213.8°F (101°C)
Freezing Point	No data available
Flash Point	73.4°F (23°C)
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (solid, gas)	No data available
Vapor Density Specific Gravity Density Solubility in Water Viscosity VOC	Heavier than air No data available $\approx 1.8 \text{ g/cm}^3$ Insoluble $\approx 4300 \text{ mPa.s}$
	< 5 g/l

OSHA = Occupational Safety & Health Administration NIOSH = National Institute for Occupational Safety ACGIH = American Conference of Governmental Industrial Hygiene

MSHA = Mine Safety and Health Administration

PEL = Permissible Exposure Level TLV = Threshold Limit Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

ABBREVIATION KEY



SECTION 10 STABILITY AND REACTIVITY

Stability	Material is stable under advised storage and handling conditions		
Reactivity	Avoid excessive heat		
Incompatibility	Strong acids, strong oxidizing agents, strong bases, reducing agents and halogenated compounds		
Conditions to Avoid	Open flames, sparks, electrostatic discharge, heat and other ignition sources; prolonged exposure to direct direct sunlight.		
Hazardous Polymerization	Storage temperatures over 140°F can produce uncontrolled and exothermic polymerization		
Hazardous Decomposition	During a fire, irritating/toxic gases such as: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbon by-products and black smoke		

SECTION 11 TOXICOLOGICAL INFORMATION

Component Analysis

COMPONENT	CAS NUMBER	ORAL LD50 (mg/kg)	DERMAL LD50 (mg/kg)	INHALATION LC50 (mg/L)
Methyl methacrylate	80-62-6	>7,872 (rat)	>5,000 (rabbit)	29.8/4hr (rat)
2-Ethylhexyl acrylate	103-11-7	>4,435 (rat)	>7,522 (rabbit)	N/A
Diisopropanol-P-toluidine	38668-48-3	>100 (rat)	N/A	N/A

POTENTIAL HEALTH EFFECTS

Eyes Acute <i>(Immediate)</i> Chronic (Delayed) Skin	Conjunctivitis, irritation, tearing and burning Causes eye irritation.
Acute <i>(Immediate)</i> Chronic (Delayed) Inhalation	Irritation and inflammation. Allergic skin reaction may occur. Dermatitis Causes skin irritation
Acute <i>(Immediate)</i> Chronic (Delayed) Ingestion	May cause respiratory irritation. May cause drowsiness or dizziness. Prolonged inhalation may be harmful
Acute <i>(Immediate)</i> Chronic (Delayed)	Swallowing a small quantity of this material will result in serious health hazard No data available
Component Carcinogenicity	Methyl methacrylate (80-62-6) IARC: Group 3 - Not classifiable as to its carcinogenicity to humans 2-Ethylhexyl acrylate (103-11-7)
	IARC: Group 2B - Possibly carcinogenic to humans Crystalline silica (14808-60-7) IARC: Group 1 - Known Human Carcinogen (IARC Monograph 68 [1997]
	IARC: Group 2B - Possibly carcinogenic to humans Crystalline silica (14808-60-7)



SECTION 11 TOXICOLOGICAL INFORMATION

Reproductive Toxicity	Based on available data, the classification criteria are not met
Teratogenicity	Based on available data, the classification criteria are not met
Mutagenicity	Based on available data, the classification criteria are not met
Aspiration Hazard	Not classified
STOT Single Exposure	STOT RE Hazard Category 3
STOT Repeated Exposure	Based on available data, the classification criteria are not met.

SECTION 12 ECOLOGICAL INFORMATION

Eco toxicity				
COMPONENT	CAS NUMBER FISH LC50 (mg/L)		DAPHNA EC50 (mg/L)	ALGAE EC50 (mg/L)
Methyl methacrylate	80-62-6	>191 (Bluegill sunfish) 96 Hours	>69 (Water flea) 48 Hours	>110 (algae) 72 hours
2-Ethylhexyl acrylate	103-11-7	>100 (Rainbow trout) 96 Hours	>17 (Water flea) 48 Hours	>44 (green algae) 72 Hours
Diisopropanol-P-toluidine	38668-48-3	N/A	>28.8 (Water flea) 48 Hours	>84 (green algae) 72 Hours
Persistence & Degradability	Biodegradation: >95 % Exposure time: 15 days			
	2-ethylhexyl acrylate (103-11-7) Result: Readily biodegradable; Biodegradation: 75 % Exposure time: 15 days			
Bioaccumulative potential	No Data Available			
Soil Absorption/Mobility	No Data Available			
General Notes	Avoid release to the environment			

SECTION 13 DISPOSAL CONSIDERATIONS		
Waste Disposal Method	Dispose of in a manner consistent with federal, state and local regulations. This includes pails containing uncured material. Pails with cured/hardened remains of product can be sent for recycling.	
Recommendation	Product mixed with hardener and fully cured is ecologically save and can be disposed to local refuse deposit or recycling facility.	

SECTION 14 TRANSPORT INFORMATION				
Classification (TDG & DOT)	3 Flammable liquids			
Identification Number	UN1263			
Shipping name	Paint including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base			
Packaging group	II			

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LC₅₀ = Lethal concentration, 50 Percent

 LoFDow
 = cetration-water partition coefficient

 DOT
 = Department of Transportation

 STOT
 = Specific Target Organ Toxicity



SECTION 15 REGULATORY INFORMATION TSCA Inventory Components are listed **DSL** Inventory Components are listed **CERCLA** Under requirements of the Comprehensive Environmental Response, Compensation, and Liability Act, methyl methacrylate (80-62-6) has a Reportable Quantity of 1,000 lbs. Any spill or release above this RQ must reported to the National Response Center (800-424-8802). Sara 311/312 Categories Fire Hazard; Acute health Hazard **Sara 313** methyl methacrylate (80-62-6) 10-30% **Clean Air Act** methyl methacrylate (80-62-6) 10-30% **CA Proposition 65** Silica, crystalline (14808-60-7) WARNING: This product contains a chemicals known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Right to Know States

COMPONENT	CAS NUMBER	СА	MA	MN	IJ	PA	RI
Methyl methacrylate	80-62-6	No	Yes	No	Yes	Yes	Yes
2-Ethylhexyl acrylate	103-11-7	No	No	No	Yes	Yes	Yes
Diisopropanol-P-toluidine	38668-48-3	No	No	No	No	No	No
Crystalline Silica	14808-60-7	Yes	Yes	Yes	Yes	Yes	Yes

SECTION 16 OTHER INFORMATION				
Preparation Date	April 2020			
Revision Date	March 2022			
Summary of Changes	Branding Update			
Disclaimer	The information and recommendations contained herein are to the best of Performance Roof Systems' knowledge and belief, accurate and reliable as of the date issued. Performance Roof Systems does not warrant or guarantee their accuracy or reliability, and Performance Roof Systems shall not be liable for any loss or damage arising out of the use thereof.			
	The information and recommendations are offered for the users consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. It is also the users responsibility to make certain that it is relying upon the most recent, updated, information and recommendations available from Performance Roof Systems.			