

SAFETY DATA SHEET
DERBIFLASH RS 281 CLEAR FINISH



SECTION 1 IDENTIFICATION

Product Name Derbiflash RS 281 Clear Finish
Recommended Use Top coat for PMMA waterproofing system
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.
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

GHS = Global Harmonized System

STOT = Specific Target Organ Toxicity

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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
Methyl methacrylate	80-62-6	15 - 40
2-Ethylhexyl acrylate	103-11-7	7 - 13
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.

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

ABBREVIATION KEY

OSHA = Occupational Safety & Health Administration

HCS = Hazard Communication Standard

SECTION 5 FIRE FIGHTING MEASURES

Fire Hazard	Highly flammable liquid and vapor
Flash Point	35.6°F (MMA Closed Cup) LEL: N/A UEL: N/A
Hazardous Combustion	CO, CO ₂ , Nitrogen oxides, hydrocarbons, black smoke and methacrylic acid fumes.
Extinguishing Media	Universal foam, dry chemical powder, CO ₂ or sand
Firefighting instruction	Use of water spray when fighting fire may be inefficient because of the low flash point of the product. Evacuate area. Wear self-contained breathing apparatus and appropriate protective clothing in accordance with standards. Approach fire from upwind and fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Always stay away from containers because of the high risk of explosion. Stop leak before attempting to put out the fire. If leak cannot be stopped, and if there is no risk to the surrounding area, let the fire burn itself out. Move containers from fire area if this can be done without risk. Cool containers with flooding quantities of water until well after fire is out.
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	This product and its vapours are extremely flammable and toxic. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing mist, vapour or dust. Wash thoroughly after handling. Before handling, it is very important that ventilation controls are operating and protective equipment requirements are being followed. People working with this product would be properly trained regarding its hazards and its safe use. Eliminate all ignition sources (e.g. sparks, open flames, hot surfaces). Keep away from heat. Ground transfer containers to avoid static accumulation. Tightly reseal all partially used containers. Do not cut, puncture or weld containers.
Storage	Store in a cool well-ventilated area out of direct sunlight and away from heat and ignition sources. No smoking near storage area. Store away from incompatible materials. Store the product according to occupational health and safety regulations and fire and building codes. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment near storage area. Inspect all containers to make sure they are properly labelled.

ABBREVIATION KEY

LEL = Lower Explosion Limit
NFPA = National Fire Protection Association

UEL = Upper Explosion Limit

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	NIOSH
Methyl methacrylate	80-62-6	410 mg/m ³ TWA	205 mg/m ³ TWA 410 mg/m ³ (STEL)	410 mg/m ³ TWA

**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	No data available
Freezing Point	No data available
Flash Point	35.6°F (2°C)
Ignition Temperature	446°F (230°C)
Decomposition Temperature	No data available
Flammability (solid, gas)	No data available
Vapor Density	Heavier than air
Specific Gravity	≈ 0.99 kg/L
Solubility in Water	Insoluble
Viscosity	No data available
VOC	< 5 g/l

ABBREVIATION KEY

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

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)	78,000/4hr (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 (Immediate)	Conjunctivitis, irritation, tearing and burning
Chronic (Delayed)	Causes eye irritation.
Skin	
Acute (Immediate)	Irritation and inflammation. Allergic skin reaction may occur. Dermatitis
Chronic (Delayed)	Causes skin irritation
Inhalation	
Acute (Immediate)	May cause respiratory irritation. May cause drowsiness or dizziness.
Chronic (Delayed)	Prolonged inhalation may be harmful
Ingestion	
Acute (Immediate)	Swallowing a small quantity of this material will result in serious health hazard
Chronic (Delayed)	No data available
Component Carcinogenicity	Methyl methacrylate (80-62-6) IARC: Group 3 - Possibly carcinogenic to humans 2-Ethylhexyl acrylate (103-11-7) IARC: Group 2B - Possibly carcinogenic to humans
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.

ABBREVIATION KEY

LD50 = Lethal dose, 50 percent
 IARC = International Agency for Research on Cancer
 ACGIH = American Conference of Governmental Industrial Hygiene

LC50 = Lethal concentration, 50 Percent
 NTP = National Toxicology Program
 STOT = Specific Target Organ Toxicity

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

Methyl methacrylate (80-62-6) Result: Readily biodegradable;
 Biodegradation: >95 % Exposure time: 15 days

2-ethylhexyl acrylate (103-11-7) Result: Readily biodegradable;
 Biodegradation: 75 % Exposure time: 15 days

Soil Absorption/Mobility

No Data

Ozone-Depletion Potential

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B)

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

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 This product does not contain chemical known in the state of California to cause cancer, birth defects or reproductive harm.

Right to Know States

COMPONENT	CAS NUMBER	CA	MA	MN	NJ	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

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.

ABBREVIATION KEY

TSCA = Toxic Substances Control Act
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act,

DSL = Domestic Substances List (Canada)
 SARA = Superfund Amendments and Reauthorization Act