SAFETY DATA SHEET
DERBIFLASH RS 230 FLASH

SECTION 1 IDENTIFICATION

Product Name	Derbiflash RS 230 Flash: Summer/Winter (Grey & White)
Recommended Use	Waterproofing
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
Acute Oral Toxicity: Category 4
Skin Irritation: Category 2
Eye Irritation: Category 2A
Skin Sensitization: Category 1
STOT: Single Exposure: Respiratory Tract Irritation; Category 3
Carcinogenicity: Category 1A

Hazard Pictographs

Signal Word

DANGER

Hazard Statements

H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H350 - May cause cancer (inhalation)
H360 - May damage fertility or the unborn child
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

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

ABBREVIATION KEY

GHS = Global Harmonized System
STOT = Specific Target Organ Toxicity

SECTION 2 HAZARDS

Precautionary Statements

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 + P312 If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
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	10 - 30
Titanium dioxide*	13463-67-7	5 - 15
Crystalline silica*	14808-60-7	1 - 5
Naphtha, hydrodesulfurized heavy	64742-82-1	<1
Naphtha, light aromatic	64742-95-6	<1

** Components listed for their unbound powder form. W. en these components are used in applications such as oatings, they become part of a mixture and are not considered hazardous.*

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.*

ABBREVIATION KEY

OSHA = Occupational Safety & Health Administration
HCS = Hazard Communication Standard

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	50°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	Water spray, dry chemical, foam, carbon dioxide.
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, ***see Section 13, Disposal Considerations.***

ABBREVIATION KEY

LEL = Lower Explosion Limit
UEL = Upper Explosion Limit
NFPA = National Fire Protection Association

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. ***Use personal protective equipment as described in Section 8.***

Storage

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

COMPONENT	CAS NUMBER	OSHA PEL	ACGIH TLV	NIOSH REL
Methyl methacrylate	80-62-6	410 mg/m³ TWA	205 mg/m³ TWA 410 mg/m³ (STEL)	410 mg/m³ TWA
Naphtha, hydrodesulfurized heavy	64742-82-1	400 mg/m³ TWA 2,900 mg/m³ (total)	0.025 mg/m³ TWA (respirable)	400 mg/m³ TWA 1,800 mg/m³ (Ceiling)
Titanium Dioxide	13463-67-7	15 mg/m³ TWA (total)	10 mg/m³ TWA	Not Established
Crystalline silica	14808-60-7	0.1 mg/m³ TWA (respirable)	0.025 mg/m³ TWA (respirable)	0.05 mg/m³ TWA (respirable

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.

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 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Grey or White
Odor	Strong, solvent-like
Odor Threshold	No data available
pH	No data available
Relative Evaporation Rate	No data available
Boiling Point	>213.8°F
Freezing Point	No data available
Flash Point	>50°F
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Flammability (solid, gas)	No data available
Vapor Density	Heavier than air
Specific Gravity	0.97 - 1.4 g/L @ 69.8°F
Solubility in Water	Insoluble
Viscosity	2,500 - 4,200 mPa*s @ 68°F
VOC	2.4 g/L

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	>7,900 (rat)	>5,000 (rabbit)	4632 ppm/4hr
2-Ethylhexyl acrylate	103-11-7	>4,435 (rat)	>7,522 (rabbit)	N/A
Naphtha, hydrodesulfurized heavy	64742-82-1	>5,000 (rat)	>3,160 (rabbit)	<7.63/4hr
Titanium Dioxide	13463-67-7	> 10,000 (rat)	> 10,000 (rabbit)	N/A
Crystalline silica	14808-60-7	>500 (rat)	N/A	N/A
Naphtha, light aromatic	64742-82-1	>3,492 (rat)	>3,160 (rabbit)	N/A

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 11 TOXICOLOGICAL INFORMATION

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 Crystalline silica (14808-60-7)
IARC: Group 1 - Known Human Carcinogen (IARC Monograph 68 [1997]
ACGIH: A2 - Suspected Human Carcinogen
NTP: Known Human Carcinogen

Titanium Dioxide (13463-67-7)
IARC: Group 2B - Known Human Carcinogen

Carcinogenicity According to IARC, No significant exposure to titanium dioxide and crystalline silica should occur because these components are bound in the mixture and dust exposure would not be expected

Reproductive Toxicity May damage fertility or the unborn child

Teratogenicity Based on available data, the classification criteria are not met

Mutagenicity May cause genetic defects

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	243 - 275 (fathead minnow) 96 Hrs	>69 (Water flea) 48 Hours	>110 (algae) 72 hours
2-Ethylhexyl acrylate	103-11-7	>3.4 (rainbow trout) 96 Hrs	>17.45 (Water flea) 48 Hours	>5.28 (algae) 72 Hours
Naphtha, hydrodesulfurized heavy	64742-82-1	>8.8 (rainbow trout) 96 Hours	>2.7 - 5.1 (Water flea) 48 Hours	N/A
Naphtha, Light aromatic	64742-95-6	>9.22 (rainbow trout) 96 Hours	>6.14 (Water flea) 48 Hours	>9.2 (algae) 72 Hours

Eco toxicity - General Harmful to aquatic life with long lasting effects

ABBREVIATION KEY

LC_{50} = Lethal concentration, 50 Percent
EC_{50} = Effective concentration, 50 Percent
$lofP_{ow}$ = octanol–water partition coefficient
RCRA = Resource Conservation and Recovery Act
DOT = Department of Transportation
TGA = Therapeutic Goods Administration

SECTION 12 ECOLOGICAL INFORMATION

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

Bioaccumulation Potential

COMPONENT	CAS NUMBER	LOG P_{OW}	TEMPERATURE	SOIL pH
Methyl methacrylate	80-62-6	0.70	68˚F	7
2-Ethylhexyl acrylate	103-11-7	4.64	77˚F	N/A

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

This is "RCRA" regulated hazardous waste [D001 Ignitable per 40 CFR 260.21] and must be disposed in a permitted facility. Containers are hazardous waste if not emptied completely (less than 1 inch of residue).

Dispose of in an environmentally safe manner and in accordance with governmental regulations. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean since residue is difficult to remove. For work on tanks, refer to OSHA regulation ANSI Z49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations.

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; Chronic health Hazard;

Sara 313 methyl methacrylate (80-62-6) 10-30%

Clean Air Act methyl methacrylate (80-62-6) 10-30%

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

SECTION 15 REGULATORY INFORMATION

CA Proposition 65

This product can expose you to chemicals including silica and titanium dioxide which are known to the State of California to cause cancer. This product can expose you to benzene which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Right to Know States

COMPONENT	CAS NUMBER	CA	MA	MN	NJ	PA	RI
Methyl methacrylate	80-62-6	Yes	Yes	Yes	Yes	Yes	Yes
2-Ethylhexyl acrylate	103-11-7	No	Yes	Yes	Yes	Yes	No
Naphtha, heavy	64742-82-1	Yes	Yes	Yes	Yes	Yes	Yes
Titanium Dioxide	13463-67-7	Yes	Yes	Yes	Yes	Yes	Yes
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.

ABBREVIATION KEY