Safety Data Sheet

Issue Date: 09-Oct-2023 **Revision Date:** 09-Oct-2023 **Version** 1

1. IDENTIFICATION

Product identifier
Product Name FlakeShield Fast Cure 6H – Part B

Other means of identification
SDS # RESIN-017

SKU: RFFSFCB

UN/ID No UN3267

Recommended use of the chemical and restrictions on use
Recommended Use Moisture Vapor Barrier Fast-Cure Epoxy Coating.

Details of the supplier of the safety data sheet
Supplier Address
Resinforce Products LLC
12 Pixley Industrial Parkway
Rochester, NY 14624
Phone: (585) 623-5075

Emergency telephone number
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Amber liquid **Physical state** Liquid

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Skin sensitization	Category 1

Signal Word
Danger

Hazard statements
Harmful if inhaled
Causes severe skin burns and eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction

Precautionary Statements - Prevention
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response
Immediately call a poison center or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a poison center or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards
Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Alkyl Phenol polyamine	Proprietary	80-100
Benzyl alcohol	100-51-6	1-10
Diethylene triamine	111-40-0	2-4
Ethylene diamine	107-15-3	1-3

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice Immediately call a poison center or doctor/physician.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

Ingestion Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms Harmful if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
In case of fire: water fog, foam, dry chemical powder, carbon dioxide (CO2).

Unsuitable Extinguishing Media Water jet.

Specific Hazards Arising from the Chemical
During fire, nitrous gases, fumes/smoke, isocyanates and vapor may be formed.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Wear appropriate protective equipment and clothing during clean- up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see section 8 of the SDS.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Incompatible Materials Strong oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Diethylene triamine 111-40-0	TWA: 1 ppm S*	(vacated) TWA: 1 ppm (vacated) TWA: 4 mg/m^3	TWA: 1 ppm TWA: 4 mg/m^3
Ethylene diamine 107-15-3	TWA: 10 ppm S*	TWA: 10 ppm TWA: 25 mg/m^3 (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m^3	IDLH: 1000 ppm TWA: 10 ppm TWA: 25 mg/m^3

Appropriate engineering controls

Engineering Controls Local exhaust ventilation required. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Provide sufficient ventilation to keep vapors below permissible exposure limit. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use tightly sealed goggles or safety glasses with side shields which are resistant to Chemicals. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Wear chemical resistant protection gloves. Wear impervious clothing as necessary to protect against coming in contact with product. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection If insufficient ventilation, wear respiratory protection. Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Do not eat, drink or smoke during work. Avoid all contact with skin or eye. If clothing comes into contact with material, do not allow out of the workplace. Clean hands and any exposed skin thoroughly after work and before breaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Amber liquid	**Odor**	Not determined
Color	Amber	**Odor Threshold**	Not determined

Property	**Values**	**Remarks • Method**
pH	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	>93 °C / >199.4	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-Not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor Pressure	Not determined	
Vapor Density	No data available	
Relative Density	0.9-1.0	
Water Solubility	Partially soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	No data available	
Hyphen	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
This product will polymerize if mixed with an epoxy resin. Considerable heat can evolve.

Conditions to Avoid
Avoid temperatures exceeding the flash point. Epoxy resins under uncontrolled conditions.

Incompatible materials
Strong oxidizing agents. Acids.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Harmful if inhaled.

Ingestion Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	> 4178 mg/m^3 (Rat) 4 h
Diethylene triamine 111-40-0	= 1080 mg/kg (Rat)	= 672 mg/kg (Rabbit)	= 70 mg/L (Rat) 4 h
Ethylene diamine 107-15-3	= 637 mg/kg (Rat)	= 560 mg/kg (Rabbit)	= 14.7 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes severe eye damage.

Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 6,044.70 mg/kg
Dermal LD50 8,800.00 mg/kg
Gas 7,000.00 ppm
ATEmix (inhalation-dust/mist) 1.21 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea

Benzyl alcohol 100-51-6		LC50: =460mg/L (96h, Pimephales promelas) LC50: =10mg/L (96h, Lepomis macrochirus)	EC50: =23mg/L (48h, water flea)
Diethylene triamine 111-40-0	EC50: =1164mg/L (72h, Pseudokirchneriella subcapitata) EC50: =345.6mg/L (96h, Pseudokirchneriella subcapitata) EC50: =592mg/L (96h, Desmodesmus subspicatus)	LC50: =248mg/L (96h, Poecilia reticulata) LC50: =1014mg/L (96h, Poecilia reticulata)	EC50: =16mg/L (48h, Daphnia magna)
Ethylene diamine 107-15-3	EC50: =645mg/L (72h, Pseudokirchneriella subcapitata) EC50: =151mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 98.6 - 131.6mg/L (96h, Pimephales promelas) LC50: 191 - 254mg/L (96h, Pimephales promelas) LC50: =115.7mg/L (96h, Pimephales promelas) LC50: 180 - 560mg/L (96h, Poecilia reticulata)	EC50: =17mg/L (48h, Daphnia magna)

Persistence/Degradability
Not determined.

Bioaccumulation
There is no data for this product.

Mobility

Chemical name	Partition coefficient
Benzyl alcohol 100-51-6	1.05
Diethylene triamine 111-40-0	-1.3
Ethylene diamine 107-15-3	-1.221

Other adverse effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Diethylene triamine 111-40-0	Toxic
Ethylene diamine 107-15-3	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No	UN3267
Proper Shipping Name	Corrosive liquid, Basic, Organic, n.o.s. (Diethylene triamine, Ethylene diamine)
Transport hazard class(es)	8
Packing Group	II

IATA

UN number or ID number	UN3267
Proper Shipping Name	Corrosive liquid, Basic, Organic, n.o.s. (Diethylene triamine, Ethylene diamine)
Transport hazard class(es)	8
Packing group	II

IMDG

UN number or ID number	UN3267
Proper Shipping Name	Corrosive liquid, Basic, Organic, n.o.s. (Diethylene triamine, Ethylene diamine)
Transport hazard class(es)	8
Packing Group	II
Marine Pollutant	This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AIIC
Alkyl Phenol polyamine	X	ACTIVE	X	X	X	X	X	X	X
Benzyl alcohol	X	ACTIVE	X	X	X	X	X	X	X
Diethylene triamine	X	ACTIVE	X	X	X	X	X	X	X
Ethylene diamine	X	ACTIVE	X	X	X	X	X	X	X

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

AICS *- Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene diamine 107-15-3	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances

Ethylene diamine	5000 lb			X

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Benzyl alcohol 100-51-6		X	X
Diethylene triamine 111-40-0	X	X	X
Ethylene diamine 107-15-3	X	X	X

16. OTHER INFORMATION

NFPA	**Health hazards**	**Flammability**	**Instability**	**Special hazards**
	-	-	-	-
HMIS	**Health hazards**	**Flammability**	**Physical hazards**	**Personal Protection**
	-	-	-	Not determined

Issue Date: 09-Oct-2023
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Revision Note: New format

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet