

Safety Data Sheet

Issue Date: 19-Dec-2024

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Version 1

1. IDENTIFICATION

Product identifier Product Name

ResinForce RF100 Epoxy Hardener Fast Cure Part B

Other means of identification SDS # Product Code UN/ID No

RESIN-024 SKU RF100BFC UN3267

Recommended use of the chemical and restrictions on use

Recommended Use

Super-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
Reproductive toxicity	Category 2

<u>Signal Word</u> 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 Suspected of damaging fertility or the unborn child



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required 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 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

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Nonyl phenol	84852-15-3	8-24
Diethylene triamine	111-40-0	3-10
Ethylene diamine	107-15-3	2-5

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	May be harmful if swallowed. 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. Suspected of damaging fertility or the unborn child.

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	Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.	
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	For containment, ensure adequate ventilation and absorb any spill with inert liquid binding material and dispose of waste safely.	
	7. HANDLING AND STORAGE	
<u>Precautions for safe handling</u> Advice on Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. 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. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace.	
Conditions for safe storage, includi	ng any incompatibilities	
Storage Conditions	Store locked up.	

Incompatible Materials Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

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

9. PHYSICAL AND CHEMICAL PROPERTIES

skin thoroughly after work and before breaks.

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Amber liquid Amber	Odor Odor Threshold	Not determined Not determined
Property pH Melting point / freezing point Initial boiling point and boiling range Flash point Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air	Values No data available No data available No data available >93°C / >199.4°F Not determined Not determined	<u>Remarks • Method</u>	
Upper flammability or explosive limits Lower flammability or explosive limits	No data available No data available		
Vapor Pressure Vapor Density Relative Density	Not determined No data available Not determined		

Water Solubility Solubility in other solvents Partition Coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties Not determined 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. Strong 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	May be harmful if swallowed.

Component Information

- -

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nonyl phenol 84852-15-3	= 1300 mg/kg (Rat)	= 2000 mg/kg (Rabbit)	-
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.

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.
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
Numerical measures of toxicity	
The following values are calculated Oral LD50 Dermal LD50 ATEmix (inhalation-dust/mist)	I based on chapter 3.1 of the GHS document 4,973.00 mg/kg 7,006.40 mg/kg >1 mg/l

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Nonyl phenol	EC50: 0.36 - 0.48mg/L (96h,	LC50: =0.135mg/L (96h,	EC50: =0.14mg/L (48h, Daphnia
84852-15-3	Pseudokirchneriella subcapitata)	Pimephales promelas)	magna)
	EC50: 0.16 - 0.72mg/L (72h,	LC50: =0.1351mg/L (96h, Lepomis	
	Pseudokirchneriella subcapitata)	macrochirus)	
	EC50: =1.3mg/L (72h,		
	Desmodesmus subspicatus)		
Diethylene triamine	EC50: =1164mg/L (72h,	LC50: =248mg/L (96h, Poecilia	EC50: =16mg/L (48h, Daphnia
111-40-0	Pseudokirchneriella subcapitata)	reticulata)	magna)
	EC50: =345.6mg/L (96h,	LC50: =1014mg/L (96h, Poecilia	
	Pseudokirchneriella subcapitata)	reticulata)	
	EC50: =592mg/L (96h,		
	Desmodesmus subspicatus)		
Ethylene diamine	EC50: =645mg/L (72h,	LC50: 98.6 - 131.6mg/L (96h,	EC50: =17mg/L (48h, Daphnia
107-15-3	Pseudokirchneriella subcapitata)	Pimephales promelas)	magna)
	EC50: =151mg/L (96h,	LC50: 191 - 254mg/L (96h,	
	Pseudokirchneriella subcapitata)	Pimephales promelas)	
		LC50: =115.7mg/L (96h,	
		Pimephales promelas)	
		LC50: 180 - 560mg/L (96h, Poecilia	
		reticulata)	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Nonyl phenol	5.4
84852-15-3	
Diethylene triamine	-1.3
111-40-0	
Ethylene diamine	-1.221
107-15-3	

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	Тохіс
Ethylene diamine 107-15-3	Toxic

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT UN/ID No Proper Shipping Name Transport hazard class(es) Packing Group	UN3267 Corrosive liquid, basic, organic, n.o.s. (Diethylene triamine, Nonyl phenol) 8 III
IATA UN number or ID number Proper Shipping Name Transport hazard class(es) Packing group	UN3267 Corrosive liquid, basic, organic, n.o.s. (Diethylene triamine, Nonyl phenol) 8 III
IMDG UN number or ID number Proper Shipping Name Transport hazard class(es) Packing Group Marine Pollutant	UN3267 Corrosive liquid, basic, organic, n.o.s. (Diethylene triamine, Nonyl phenol) 8 III This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECI	PICCS	AIIC
Nonvl phenol	V	ACTIVE	V	NCS V	V	V	~	×	v
Nonyi prienoi	^	ACTIVE	^	^	^	^	^	^	^
Diethylene triamine	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
BIS(DIMETHYLAMINOMET				Х	Х	Х		Х	
` HYL)PHENOL									
Ethylene diamine	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

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 Chemicals Inventory

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	5000 lb	5000 lb	RQ 5000 lb final RQ
107-15-3			RQ 2270 kg final RQ

SARA 313

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Nonyl phenol - 84852-15-3	84852-15-3	8-14	1.0

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethylene diamine	5000 lb			Х

US State Regulations

<u>California Proposition 65</u> This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water			Х
7732-18-5			
Diethylene triamine	Х	Х	Х
111-40-0			
Ethylene diamine	Х	X	Х
107-15-3			

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards	Flammability	Instability	Special hazards
<u>HMIS</u>	Health hazards	Flammability -	Physical hazards -	Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	19-Dec-2024 19-Dec-2024 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