

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 10.08.2019

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Revision date: 12.05.2025**RhinoCoat MB - Part B****SECTION 1: Identification****Product Identifier****Product Name:** RhinoCoat MB - Part B**Product code:** RF200-MB-B**Recommended Use of the Product and Restriction on Use****Relevant Identified Uses:** EPOXY SYSTEM - Hardener Component**Uses Advised Against:** Not determined or not applicable.**Reasons Why Uses Advised Against:** Not determined or not applicable.**Manufacturer or Supplier Details****Manufacturer:****United States**

Rhino Linings Corporation
1001 Ed Rutherford Road
Greenville, TX 75402
858-450-0441
www.rhinolinings.com

Emergency Telephone Number:**North America**

CHEMTREC
800-424-9300 (24/7)

SECTION 2: Hazard(s) Identification**GHS Classification:**

Acute toxicity (oral), category 4

Acute toxicity (dermal), category 4

Acute toxicity (inhalation), category 4

Skin corrosion, category 1A

Serious eye damage, category 1

Skin sensitization, category 1

Reproductive toxicity, category 2

Acute aquatic hazard, category 2

Chronic aquatic hazard, category 2

Label elements**Hazard Pictograms:****Signal Word:** Danger**Hazard statements:**

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H302 Harmful if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H317 May cause an allergic skin reaction
H361 Suspected of damaging fertility or the unborn child.
H401 Toxic to aquatic life
H411 Toxic 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
P260 Do not breathe dust, fumes, gas, mist, vapors or spray.
P264 Wash any exposed skin 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 must not be allowed out of the workplace.
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P273 Avoid release to the environment.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a POISON CENTER.
P308+P313 If exposed or concerned: Get medical advice or attention.
P391 Collect spillage
P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed
P501 Dispose of contents and container in accordance with local, regional, national, and international regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 84852-15-3	4-nonylphenol, branched	40-70
CAS Number: 112-24-3	Triethylenetetramine	5-10
CAS Number: 9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	5-10

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CAS Number: 100-51-6	Benzyl Alcohol	1-5
CAS Number: 143-23-7	7-azatridecane-1,13-diamine	1-5
CAS Number: 90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	1-5
CAS Number: 694-83-7	1,2-Diaminocyclohexane	1-3
CAS Number: 105-60-2	ϵ -caprolactam	0.1-2

Additional Information:

Specific chemical identity and/or exact percentages of this composition has been withheld as a trade secret.

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After Skin Contact:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

After Eye Contact:

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. Seek immediate medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

Delayed Symptoms and Effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth

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retardation, pre-term birth, birth defects and postnatal death.

Effects are dependent on exposure (dose, concentration, contact time).

Immediate Medical Attention and Special Treatment

Specific Treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

In case of skin contact, seek prompt medical attention while rinsing is continued.

In case of ingestion, seek prompt medical attention.

Notes for the Doctor:

Treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special Protective Equipment for Firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts.

Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers.

Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a

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corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

Recommended storage temperature: 16-32°C (60-90°F).

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
WEEL	Triethylenetetramine	112-24-3	8-Hour TWA: 1 ppm
	Benzyl Alcohol	100-51-6	8-Hour TWA: 44.2 mg/m ³ (10 ppm)
	Triethylenetetramine	112-24-3	8-Hour TWA: 6 mg/m ³
ACGIH	ε-caprolactam	105-60-2	8-Hour TWA: 5 mg/m ³ (Inhalable fraction and vapor)
NIOSH	ε-caprolactam	105-60-2	REL: 1 mg/m ³ (Dust)
	ε-caprolactam	105-60-2	STEL: 3 mg/m ³ (Dust)
	ε-caprolactam	105-60-2	REL: 0.22 ppm (Vapor)
	ε-caprolactam	105-60-2	REL: 1 mg/m ³ (Vapor)
	ε-caprolactam	105-60-2	STEL: 0.66 ppm (Vapor)
	ε-caprolactam	105-60-2	STEL: 3 mg/m ³ (Vapor)
OSHA	ε-caprolactam	105-60-2	TWA: 1 mg/m ³ (Dust)
	ε-caprolactam	105-60-2	STEL: 3 mg/m ³ (Dust)
	ε-caprolactam	105-60-2	TWA: 5 ppm (Vapor)
	ε-caprolactam	105-60-2	TWA: 20 mg/m ³ (Vapor)
	ε-caprolactam	105-60-2	STEL: 10 ppm (Vapor)
	ε-caprolactam	105-60-2	STEL: 40 mg/m ³ (Vapor)
United States(California)	ε-caprolactam	105-60-2	TWA: 5 ppm
	ε-caprolactam	105-60-2	TWA: 20 mg/m ³
	ε-caprolactam	105-60-2	STEL: 10 ppm
	ε-caprolactam	105-60-2	STEL: 40 mg/m ³

Biological Limit Values:

No biological exposure limits noted for the ingredient(s).

Information on Monitoring Procedures:

Not determined or not applicable.

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Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Viscous liquid
Odor	Amine
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	>93°C (>200°F)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	13% Vol / 1.3% Vol; Product does not present an explosion hazard.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.

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Relative density	11.66 lbs/gal @ 20°C (68°F)
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Product is not self-igniting
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and Reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

Strong oxidizers, acids, and bases.

Hazardous Decomposition Products:

Carbon monoxide, Carbon dioxide (CO₂), Aldehydes, Ketones

SECTION 11: Toxicological Information

Acute Toxicity

Assessment:

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Product Data: No data available.

Substance Data:

Name	Route	Result
4-nonylphenol, branched	oral	LD50 Rat: 1246 mg/kg
	dermal	LD50 Rabbit: 2031 mg/kg
Triethylenetetramine	oral	LD50 Rat: 1591.4 mg/kg
	dermal	LD50 Rabbit: 1465.4 mg/kg
Poly(propylene glycol) bis(2-aminopropyl ether)	oral	LD50 Rat: 2885.3 mg/kg
	dermal	LD50 Rabbit: 2979.7 mg/kg
Benzyl Alcohol	oral	LD50 Rat: 1230 mg/kg
	inhalation	LC50 Rat: >4.178 mg/L (4 hr [aerosol])
	dermal	LD50 Rabbit: >2000 mg/kg

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Name	Route	Result
7-azatridecane-1,13-diamine	oral	LD50 Rat: 1170 mg/kg
	dermal	LD50 Rat: 1200 mg/kg
ε-caprolactam	dermal	LD50 Rabbit: >2000 mg/kg
	oral	LD50 Rat: 1475 mg/kg
	Inhalation ATE	LC50 Rat: 1.5 mg/L (4 hr [aerosol])
2,4,6-tris(dimethylaminomethyl)phenol	oral	LD50 Rat: 1200 mg/kg
	dermal	LD50 Rat: 1280 mg/kg
1,2-Diaminocyclohexane	inhalation	LC50 Rat: 1.5 mg/L (4 hr [aerosol])
	dermal	LD50 Rat: 1870 mg/kg
	oral	LD50 Rat: 1170 mg/kg

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
4-nonylphenol, branched	Causes severe skin burns.
Triethylenetetramine	Causes severe skin burns.
Poly(propylene glycol) bis(2-aminopropyl ether)	Causes severe skin burns.
7-azatridecane-1,13-diamine	Causes severe skin burns.
ε-caprolactam	Causes skin irritation.
2,4,6-tris(dimethylaminomethyl)phenol	Causes skin irritation.
1,2-Diaminocyclohexane	Causes severe skin burns.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
4-nonylphenol, branched	Causes serious eye damage.
Triethylenetetramine	Causes serious eye damage.
Poly(propylene glycol) bis(2-aminopropyl ether)	Causes serious eye damage.
Benzyl Alcohol	Causes serious eye irritation.
7-azatridecane-1,13-diamine	Causes serious eye damage.
ε-caprolactam	Causes serious eye irritation.

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Name	Result
2,4,6-tris(dimethylaminomethyl)phenol	Causes serious eye irritation.
1,2-Diaminocyclohexane	Causes serious eye damage.

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

Name	Result
Triethylenetetramine	May cause an allergic skin reaction.
1,2-Diaminocyclohexane	May cause an allergic skin reaction.
Benzyl Alcohol	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
4-nonylphenol, branched	Not Applicable
Triethylenetetramine	Not Applicable
Poly(propylene glycol) bis(2-aminopropyl ether)	Not Applicable
Benzyl Alcohol	Not Applicable
7-azatridecane-1,13-diamine	Not Applicable
ϵ -caprolactam	Group 3
2,4,6-tris(dimethylaminomethyl)phenol	Not Applicable
1,2-Diaminocyclohexane	Not Applicable

National Toxicology Program (NTP):

Name	Classification
4-nonylphenol, branched	Not Applicable
Triethylenetetramine	Not Applicable
Benzyl Alcohol	Not Applicable
7-azatridecane-1,13-diamine	Not Applicable
ϵ -caprolactam	Not Applicable
Poly(propylene glycol) bis(2-aminopropyl ether)	Not Applicable

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Name	Classification
2,4,6-tris(dimethylaminomethyl)phenol	Not Applicable
1,2-Diaminocyclohexane	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Reproductive Toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Name	Result
4-nonylphenol, branched	Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
7-azatridecane-1,13-diamine	May cause respiratory irritation.
ε-caprolactam	May cause respiratory irritation.
1,2-Diaminocyclohexane	May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Other Information:

No data available.

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SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment:

Toxic to aquatic life.

Product Data: No data available.

Substance Data:

Name	Result
4-nonylphenol, branched	Fish LC50 Pimephales promelas: 0.128 mg/L (96 hr [Read-across substance data])
	Aquatic Invertebrates EC50 Daphnia magna: 0.0844 mg/L (48 hr [mortality, Read-across substance data])
	Aquatic Plants EC50 Desmodismus subspicatus: 1.3 mg/L (72 hr [biomass, Read-across substance data])
Triethylenetetramine	Aquatic Invertebrates EC50 Daphnia magna: 31.1 mg/L (48 hr [mobility, Read-across substance data])
	Fish LC50 Pimephales promelas: 330 mg/L (96hr [Read-across substance data])
	Aquatic Plants EC50 Raphidocelis subcapitata: 20 mg/L (72 hr [growth rate, Read-across substance data])
Poly(propylene glycol) bis(2-aminopropyl ether)	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 15 mg/L (72 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: 80 mg/L (48 hr [immobilization])
	Fish LC50 Oncorhynchus mykiss: >15 mg/L (96 hr)
Benzyl Alcohol	Fish LC50 Pimephales promelas: 460 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 230 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 770 mg/L (72 hr [growth rate])
7-azatridecane-1,13-diamine	Aquatic Invertebrates EC50 Daphnia magna: 17 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 9.3 mg/L (72 hr [growth rate])
	Bacteria EC50 activated sludge of a predominantly domestic sewage: 33 mg/L (3 hr [inhibition of total respiration])
ε-caprolactam	Fish LC50 Oncorhynchus mykiss: 707.1 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: >1000 mg/L (72 hr [growth rate])
2,4,6-tris(dimethylaminomethyl)phenol	Aquatic Plants EC50 Raphidocelis subcapitata: 46.7 mg/L (72 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: >100 mg/L (48 hr [mortality])
	Fish LC50 Cyprinus carpio: >100 mg/L (96 hr)
1,2-Diaminocyclohexane	Aquatic Plants EC50 Raphidocelis subcapitata: 76 mg/L (72 hr [growth rate, Read-across substance data])
	Fish LC50 Pimephales promelas: 1825 mg/L (96 hr [Read-across substance data])

Chronic (Long-Term) Toxicity

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Assessment:

Toxic to aquatic life with long lasting effects.

Product Data: No data available.

Substance Data:

Name	Result
4-nonylphenol, branched	Fish NOEC Pimephales promelas: 0.038 mg/L (28 d [growth rate, Read-across substance data])
	Aquatic Invertebrates NOEC Daphnia magna: 0.024 mg/L (21 d [growth, Read-across substance data])
Benzyl Alcohol	Fish NOEC Freshwater fish: 48.897 mg/L (30 d [mortality, QSAR substance data])
	Aquatic Invertebrates NOEC Daphnia magna: 51 mg/L (21 d [reproduction])
ε-caprolactam	Aquatic Invertebrates NOEC Daphnia magna: 100 mg/L (21 d [reproduction])
	Aquatic Plants NOEC Raphidocelis subcapitata: 1000 mg/L (72 hr [growth rate])
1,2-Diaminocyclohexane	Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 days [reproduction & parental length])
Poly(propylene glycol) bis(2-aminopropyl ether)	Aquatic Plants NOEC Skeletonema costatum: 100 mg/L (72 hr [growth rate])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not readily biodegradable. 0% degradation in water, measured by CO ₂ evolution, after 28 days.
Benzyl Alcohol	The substance is readily biodegradable. 92 - 96% degradation in water, measured by O ₂ consumption, after 14 days.
7-azatridecane-1,13-diamine	The substance is readily biodegradable, 100% degradation in water measured by O ₂ consumption after 28 days.
ε-caprolactam	This substance is readily biodegradable. 82% degradation in water, measured by O ₂ consumption, after 14 days.
4-nonylphenol, branched	The substance is inherently biodegradable. 48.2% degradation in water, measured by CO ₂ evolution, after 35 days.
Triethylenetetramine	The substance is not readily biodegradable. <30% degradation in water, measured by O ₂ consumption, after 28 days (Read-across substance data).
2,4,6-tris(dimethylaminomethyl)phenol	The substance is not readily biodegradable. 4% degradation in water, measured by O ₂ consumption, after 28 days.
1,2-Diaminocyclohexane	The substance is readily biodegradable. 101% degradation in water, measured by O ₂ consumption, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

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7-azatridecane-1,13-diamine	The substance is not expected to bioaccumulate (log Pow= 1.3 at 24 °C).
ε-caprolactam	This substance is not expected to bioaccumulate (log Pow= <3).
4-nonylphenol, branched	The substance has the potential to bioaccumulate (BCF: 896 dimensionless, aquatic organisms: fish).
Triethylenetetramine	The substance is not expected to bioaccumulate (log Pow: -2.65 at 25 °C, QSAR substance data).
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not expected to bioaccumulate (BCF: 3.16 L/kg, basis, whole body w.w., aquatic specie: fish, QSAR substance data).
Benzyl Alcohol	The substance is not expected to bioaccumulate (Log Kow : 1.10 at 20 °C and BCF:1.371 L/kg; QSAR substance data).
2,4,6-tris(dimethylaminomethyl)phenol	The substance is not expected to bioaccumulate (log Pow:-0.660).
1,2-Diaminocyclohexane	The substance is not expected to bioaccumulate (log Pow: < -0.9 at 20 °C).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
7-azatridecane-1,13-diamine	The substance is hardly mobile, therefore, adsorption to soil is expected (Kd= 201 - >51000).
ε-caprolactam	The substance is mobile, therefore, there is low potential for adsorption to soil and sediment (log Koc=1.76).
4-nonylphenol, branched	The substance is hardly mobile, therefore, there is a high potential for adsorption to soil and sediment (Koc: 11,060 dimensionless, Read-across substance data).
Triethylenetetramine	The substance is slightly mobile, therefore, adsorption to soil and sediment is expected (log Koc: 3.7 dimensionless, Read-across substance data).
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is mobile, therefore, there is low potential for adsorption to soil and sediment (Koc: 52.1 L/kg, QSAR substance data).
2,4,6-tris(dimethylaminomethyl)phenol	The substance is mobile, therefore, there is low potential for adsorption to soil and sediment (Koc: 20.98 L/kg, QSAR substance data)..
1,2-Diaminocyclohexane	The substance is hardly mobile, therefore, there is a high potential for adsorption to soil and sediment (log Koc:4.23).
Benzyl Alcohol	The substance is mobile, therefore, there is low potential for adsorption to soil and sediment (Koc: ca 15.7 at 20 °C, QSAR substance data).

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

4-nonylphenol, branched	The substance is not PBT.
Benzyl Alcohol	The substance is not PBT.
7-azatridecane-1,13-diamine	The substance is not PBT.
ε-caprolactam	Substance is not PBT.

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Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not PBT.
2,4,6-tris(dimethylaminomethyl)phenol	The substance is not PBT.
1,2-Diaminocyclohexane	The substance is not PBT.

vPvB assessment:

4-nonylphenol, branched	The substance is not vPvB.
Benzyl Alcohol	The substance is not vPvB.
7-azatridecane-1,13-diamine	The substance is not vPvB.
ϵ -caprolactam	Substance is not vPvB.
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not vPvB.
2,4,6-tris(dimethylaminomethyl)phenol	The substance is not vPvB.
1,2-Diaminocyclohexane	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:

The generation of waste should be avoided or minimized wherever possible. If product becomes a waste, it does not meet criteria of hazardous waste as defined in 40 CFR 261, Subpart C and D. Do not discharge into sewer system. Spill cleanup residues may still be subject to RCRA storage and disposal requirements. Dispose waste in compliance with local, state and federal regulations via licensed waste disposal contractor.

Contaminated packages:

Even after emptying, container may retain residues. Containers should be completely emptied and safely stored until appropriately reconditioned or disposed through licensed contractor in accordance with government regulation. This material and its container must be disposed of in a safe way.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	UN1760
UN Proper Shipping Name	CORROSIVE LIQUIDS, N.O.S. (Contains Nonyl Phenol, Triethylenetetramine)
UN Transport Hazard Class(es)	8  
Packing Group	II
Environmental Hazards	Marine Pollutant
Special Precautions for User	None

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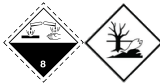
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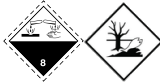
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Additional Information	This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.
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International Maritime Dangerous Goods (IMDG)

UN Number	UN1760
UN Proper Shipping Name	CORROSIVE LIQUIDS, N.O.S. (Contains Nonyl Phenol, Triethylenetetramine)
UN Transport Hazard Class(es)	8 
Packing Group	II
Environmental Hazards	Marine Pollutant
Special Precautions for User	None
Additional Information	This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	UN1760
UN Proper Shipping Name	CORROSIVE LIQUIDS, N.O.S. (Contains Nonyl Phenol, Triethylenetetramine)
UN Transport Hazard Class(es)	8 
Packing Group	II
Environmental Hazards	Marine Pollutant
Special Precautions for User	None
Additional Information	This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5):

84852-15-3	4-nonylphenol, branched	Listed
112-24-3	Triethylenetetramine	Not Listed
100-51-6	Benzyl Alcohol	Not Listed
143-23-7	7-azatridecane-1,13-diamine	Not Listed
105-60-2	ϵ -caprolactam	Not Listed
9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	Not Listed
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	Not Listed
694-83-7	1,2-Diaminocyclohexane	Not Listed

Export Notification under TSCA Section 12(b):

84852-15-3	4-nonylphenol, branched	Listed
112-24-3	Triethylenetetramine	Not Listed
100-51-6	Benzyl Alcohol	Not Listed
143-23-7	7-azatridecane-1,13-diamine	Not Listed
105-60-2	ϵ -caprolactam	Not Listed
9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	Not Listed
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	Not Listed
694-83-7	1,2-Diaminocyclohexane	Not Listed

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals:

84852-15-3	4-nonylphenol, branched	Listed
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CERCLA:

694-83-7	1,2-Diaminocyclohexane	Listed	100 lbs for RCRA D001
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RCRA:

694-83-7	1,2-Diaminocyclohexane	Listed	D001
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Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

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84852-15-3	4-nonylphenol, branched	Listed
112-24-3	Triethylenetetramine	Listed
100-51-6	Benzyl Alcohol	Listed
105-60-2	ϵ -caprolactam	Listed

New Jersey Right to Know:

112-24-3	Triethylenetetramine	Listed
105-60-2	ϵ -caprolactam	Listed

New York Right to Know:

84852-15-3	4-nonylphenol, branched	Listed
112-24-3	Triethylenetetramine	Listed
100-51-6	Benzyl Alcohol	Listed
105-60-2	ϵ -caprolactam	Listed

Pennsylvania Right to Know:

84852-15-3	4-nonylphenol, branched	Listed
112-24-3	Triethylenetetramine	Listed
100-51-6	Benzyl Alcohol	Listed
105-60-2	ϵ -caprolactam	Listed

California Proposition 65: None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

The data set forth in this sheet are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. RHINO LININGS CORPORATION makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof. Sections 11/12 Disclaimer (Toxicity/Ecotoxicity): This product itself has not been tested. Information given is based on data on the components and the toxicology of similar products. Section 14 (Transport Information): Information provided in Section 14 is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

NFPA: 3-1-0

HMIS: 3*-1-0

Initial Preparation Date: 10.08.2019

Revision date: 12.05.2025

Revision Notes:

Revision Date	Notes
2019-10-08	
2025-12-05	Internal Review

End of Safety Data Sheet