Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 08.17.2016

Revision date: 11.26.2025

DuraTite 2185P Resin

SECTION 1: Identification

Product Identifier

Product Name: DuraTite 2185P Resin

Product code: DT2185P

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: POLYURETHANE SPRAY ELASTOMER SYSTEM - Resin 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:

Flammable liquids, category 3
Acute toxicity (oral), category 4
Acute toxicity (dermal), category 4
Skin corrosion, category 1C
Serious eye damage, category 1
Skin sensitization, category 1
Germ cell mutagenicity, category 1B
Carcinogenicity, category 1B
Specific target organ toxicity - repeated exposure, category 1
Acute aquatic hazard, category 2
Chronic aquatic hazard, category 2

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H226 Flammable liquid and vapor
H302 Harmful if swallowed
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H317 May cause an allergic skin reaction
H340 May cause genetic defects.
H350 May cause cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
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
P210 Keep away from sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical, ventilating, and lighting equipment.
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P260 Do not breathe dust, fumes, gas, mist, vapors or spray.
P264 Wash any exposed skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P270 Do not eat, drink or smoke when using this product
P272 Contaminated work clothing must not be allowed out of the workplace
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.
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).
P363 Wash contaminated clothing before reuse
P333+P313 If skin irritation or rash occurs: Get medical advice or attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P370+P378 In case of fire: Use sand and/or rock wool, foam or carbon dioxide for extinction. Never use water.
P308+P313 If exposed or concerned: Get medical advice or attention.
P314 Get medical advice or attention if you feel unwell.
P391 Collect spillage
P405 Store locked up
P403+P235 Store in a well-ventilated place. Keep cool
P501 Dispose of contents and container in accordance with local, regional, national, and international regulations.

Hazards Not Otherwise Classified:

This product contains Diethyltoluenediamine (DETDA). This may cause methemoglobin formation resulting

in a reduced ability of the blood to carry oxygen; a symptom may include cyanosis. Immediately give oxygen if victim turns blue (lips, ears, fingernails). Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by supportive measures.
ALUMINUM PASTE can release vapors that can form flammable mixtures upon moderate heating to temperatures at or above the flash point. Product accumulates static charges that can cause an incendiary electrical discharge.

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	60-80
CAS Number: 68479-98-1	Diethylmethylbenzenediamine	1-10
CAS Number: 64852-22-8	Glyceryl poly(oxypropylene) Triamine	1-10
CAS Number: 136210-30-5	Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	1-10
CAS Number: 127087-87-0	4-Nonylphenol, branched, ethoxylated	1-5
CAS Number: 7429-90-5	Aluminum powder (stabilized)	1-5
CAS Number: 64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	1-3

Additional Information:

Specific chemical identity and/or exact percentage (concentration) of each ingredient may be held as confidential business information (CBI). Any ingredient not disclosed in this section may have been determined not to be hazardous to health or the environment, or it may be present at a level below its disclosure threshold.

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.

Product is flammable. Exposure to sources of ignition may cause physical injury.

Delayed Symptoms and Effects:

Symptoms of exposure may be delayed.

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

Exposure may cause genetic defects. Effects are dependent on exposure (dose, concentration, contact time).

Exposure may cause cancer. Effects are dependent on exposure (dose, concentration, contact time).

Causes damage to organs through prolonged or repeated exposure. 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:

Dry chemical, CO2, water spray or alcohol-resistant foam.

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

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

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:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

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. A vapor-suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers 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 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
OSHA	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 15 mg/m³ (total dust)
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 5 mg/m³ (respirable fraction)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	TWA: 400 mg/m³ (100 ppm)
United States(California)	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 5 mg/m³ (respirable fraction)
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 10 mg/m³ (total dust)
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 5 mg/m³ (Pyro powders)
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA-PEL: 5 mg/m³ (Welding fumes)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	STEL: 1800 mg/m³ (400 ppm)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	8-Hour TWA-PEL: 1600 mg/m³ ([400 ppm] Rubber solvent, naphtha)
NIOSH	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA: 10 mg/m³ (Total dust [up to 10 hr])
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA: 5 mg/m³ (Respirable [up to 10 hr])
	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA: 5 mg/m³ (Pyro powders and welding fumes, as Al [up to 10 hr])
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	REL-TWA: 350 mg/m³ ([up to 10 hr] for Stoddard Solvent)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Ceiling Limit: 1800 mg/m³ ([15 min] for Stoddard Solvent)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	IDLH: 1000 ppm
ACGIH	Aluminum powder (stabilized)	7429-90-5	8-Hour TWA: 1 mg/m³ (respirable fraction)
	Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	8-Hour TWA: 100 ppm (for Stoddard Solvent)

Biological Limit Values:

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

Information on Monitoring Procedures:

Not determined or not applicable.

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	Yellow Liquid
Odor	Slight Amine
Odor threshold	Not determined or not available.
pH	9 - 11
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	No data available for mixture. Aluminum Paste 38°C (100°F)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
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.
Relative density	1.06 @ 25°C (77°F)
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.

Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	400-600 cps
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:

Product will not undergo hazardous polymerization. Corrosive effects to metal are not anticipated. Based on its structural properties the product is not classified as oxidizing. Does not form flammable gases in the presence of water.

Chemical Stability:

Stable under recommended handling and storage conditions.
Product is hygroscopic; contamination with moisture will negatively affect product performance. Avoid unintended contact with isocyanates; the reaction will generate heat.

Possibility of Hazardous Reactions:

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

Conditions to Avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials. Vapor accumulation in low or confined areas.

Incompatible Materials:

Strong oxidizing agents. Water, alcohols, amines, bases, acids, copper, aluminum and zinc alloys.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.
In fire conditions, decomposition depends upon temperature, air supply and the presence of other materials.
Can include, but are not limited to carbon and nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules, aluminum oxides.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment:

Harmful if swallowed.
Harmful in contact with skin.

Product Data: No data available.

Substance Data:

Name	Route	Result
Poly(propylene glycol) bis(2-aminopropyl ether)	oral	LD50 Rat: 2885.3 mg/kg
	dermal	LD50 Rabbit: 2979.7 mg/kg
Diethylmethylbenzenediamine	oral	LD50 Rat: 738 mg/kg
	Dermal ATE	LD50 Rabbit: 1100 mg/kg
	inhalation	LC50 Rat: > 0.6125 mg/L (4 hr [aerosol])

Name	Route	Result
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	oral	LD50 Rat: >2000 mg/kg ([Read-across substance data])
	dermal	LD50 Rat: >2000 mg/kg ([Read-across substance data])
	inhalation	LC50 Rat: >4224 mg/m³ (4 hr [aerosol, Read-across substance data])
4-Nonylphenol, branched, ethoxylated	oral	LD50 Rat: 1602 mg/kg
Aluminum powder (stabilized)	oral	LD50 Rat: 15,900 mg/kg
	inhalation	LC50 Rat: >5.09 mg/L (4 hr [Aerosol; read-across])
Naphtha (petroleum), hydrodesulfurized heavy	oral	LD50 Rat: > 5000 mg/kg ([Read-across substance data])
	dermal	LD50 Rabbit: >2000 mg/kg ([Read-across substance data])
	inhalation	LC50 Rat: >5.6 mg/L (4 hr [Vapour, Read-across substance data])

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Poly(propylene glycol) bis(2-aminopropyl ether)	Causes severe skin burns.
Glyceryl poly(oxypropylene) Triamine	Causes skin irritation.
4-Nonylphenol, branched, ethoxylated	Causes skin irritation.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Poly(propylene glycol) bis(2-aminopropyl ether)	Causes serious eye damage.
Diethylmethylbenzenediamine	Causes serious eye irritation
Glyceryl poly(oxypropylene) Triamine	Causes serious eye damage.
4-Nonylphenol, branched, ethoxylated	Causes serious eye irritation.

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

Name	Result
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	May cause an allergic skin reaction.

Carcinogenicity

Assessment:

May cause cancer.

Product Data: No data available.

Substance Data:

Name	Species	Result
Naphtha (petroleum), hydrodesulfurized heavy		May cause cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Poly(propylene glycol) bis(2-aminopropyl ether)	Not Applicable
Glyceryl poly(oxypropylene) Triamine	Not Applicable
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Not Applicable
4-Nonylphenol, branched, ethoxylated	Not Applicable
Diethylmethylbenzenediamine	Not Applicable
Aluminum powder (stabilized)	Not Applicable
Naphtha (petroleum), hydrodesulfurized heavy	Group 3

National Toxicology Program (NTP):

Name	Classification
Glyceryl poly(oxypropylene) Triamine	Not Applicable
Poly(propylene glycol) bis(2-aminopropyl ether)	Not Applicable
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Not Applicable
4-Nonylphenol, branched, ethoxylated	Not Applicable
Diethylmethylbenzenediamine	Not Applicable
Aluminum powder (stabilized)	Not Applicable
Naphtha (petroleum), hydrodesulfurized heavy	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment:

May cause genetic defects.

Product Data:

No data available.

Substance Data:

Name	Result
Naphtha (petroleum), hydrodesulfurized heavy	May cause genetic defects.

Reproductive Toxicity

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

Product Data:

No data available.

Substance Data: No data available.

Specific Target Organ Toxicity (Single Exposure)

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

Product Data:

No data available.

Substance Data: No data available.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment:

Causes damage to organs through prolonged or repeated exposure.

Product Data:

No data available.

Substance Data:

Name	Result
Diethylmethylbenzenediamine	May causes damage to organs through prolonged or repeated exposure.
Naphtha (petroleum), hydrodesulfurized heavy	Causes damage to the central nervous system through prolonged or repeated exposure.

Aspiration toxicity

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

Product Data:

No data available.

Substance Data:

Name	Result
Naphtha (petroleum), hydrodesulfurized heavy	May be fatal if swallowed and enters airways.

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.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment:

Toxic to aquatic life.

Product Data: No data available.

Substance Data:

Name	Result
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)
Diethylmethylbenzenediamine	Fish LC50 Pimephales promelas: >106 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >0.3 mg/L (48 hr [mobility])
	Aquatic Plants ErC50 Algae: 104 mg/L (72 hr [growth rate])
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Aquatic Plants EC50 Desmodesmus subspicatus: >1.319 mg/L (48 hr [growth rate and yield, Read-across substance data])
	Aquatic Invertebrates EC50 Daphnia magna: 88.6 mg/L (48 hr [mobility, Read-across substance data])
	Fish LC50 Danio rerio: 66 mg/L (96 hr [Read-across substance data])
4-Nonylphenol, branched, ethoxylated	Fish LC50 Pimephales promelas: 0.323 mg/L (96 h [as Polyethylene glycol branched nonylphenyl ether])
Aluminum powder (stabilized)	Fish LC50 Pimephales promelas: > 218.64 mg/L (96 hr)
	Aquatic Invertebrates LC50 Daphnia magna: 1.4 mg/L (48 hr)
Naphtha (petroleum), hydrodesulfurized heavy	Aquatic Plants EC50 Raphidocelis subcapitata: 3.1 mg/L (72 hr [growth rate-Read-across substance data])
	Aquatic Invertebrates EC50 Daphnia magna: 4.5 mg/L (48 hr [EL50-mobility, Read-across substance data])
	Fish LC50 Pimephales promelas: 8.2 mg/L (96 hr [LL50- Read-across substance data])

Chronic (Long-Term) Toxicity

Assessment:

Toxic to aquatic life with long lasting effects.

Product Data: No data available.

Substance Data:

Name	Result
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Aquatic Invertebrates NOEC Daphnia magna: > 0.12 mg/L (21 d [mortality, Read-across substance data])
	Aquatic Plants NOEC Desmodesmus subspicatus: 6.25 mg/L (72 hr [Read-across substance data; cell density])
Poly(propylene glycol) bis(2-aminopropyl ether)	Aquatic Plants NOEC Skeletonema costatum: 100 mg/L (72 hr [growth rate])
4-Nonylphenol, branched, ethoxylated	Aquatic Invertebrates NOEC Daphnia magna: 0.1 mg/L (21 d - reproduction [as Polyethylene glycol branched nonylphenyl ether])
Aluminum powder (stabilized)	Fish EC50 Pimephales promelas: 1.078 mg/L (7 d [biomass])
	Aquatic Invertebrates LC50 Daphnia magna: 1.61 mg/L (28 d)

Name	Result
Naphtha (petroleum), hydrodesulfurized heavy	Aquatic Invertebrates NOEC Daphnia magna: 2.6 mg/L (21 d [NOELR-reproduction, Read-across substance data])
	Fish NOEC Pimephales promelas: 2.6 mg/L (14 d [NOELR-mortality, Read-across substance data])

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 CO2 evolution, after 28 days.
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	The substance is not readily biodegradable. 0% degradation in water, measured by O2 consumption, after 28 days.
4-Nonylphenol, branched, ethoxylated	The substance is readily biodegradable. 99% degradation in water, measured by TOC removal, after 28 days (Read-across substance data).
Aluminum powder (stabilized)	Biotic degradation is an irrelevant process for inorganic substances.
Naphtha (petroleum), hydrodesulfurized heavy	Standard biodegradability studies are not applicable to UVCB substances.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
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).
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	The study clearly shows that the test item has no significant potential for bioaccumulation. After a certain time, even very low levels of the accumulated test item are quickly eliminated.
4-Nonylphenol, branched, ethoxylated	The substance is not expected to bioaccumulate (BCF= > 9.09 - < 16 L/kg, Read-across substance data).
Diethylmethylbenzenediamine	The substance is not expected to bioaccumulate (BCF: 3.78 L/kg wet wt, QSAR substance data).
Aluminum powder (stabilized)	The available evidence shows the absence of aluminium biomagnification across trophic levels both in the aquatic and terrestrial food chains.
Naphtha (petroleum), hydrodesulfurized heavy	Standard bioaccumulation studies are not applicable to UVCB substances.

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
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).
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	The substance is hardly mobile to immobile, therefore, there is a significant potential for adsorption to soil and sediment (log Koc: >= 4.2 - <= 5.1).
4-Nonylphenol, branched, ethoxylated	The substance is moderately mobile, therefore, slight adsorption to soil is expected (log Koc= 2.631 dimensionless at 25 °C).

Name	Result
Diethylmethylbenzenediamine	The substance is mobile, therefore, there is low potential for adsorption to soil and sediment (log Koc: 1.645, QSAR substance data).
Naphtha (petroleum), hydrodesulfurized heavy	Standard adsorption/desorption studies are not applicable to UVCB substances.

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:

Diethylmethylbenzenediamine	The substance is not PBT.
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not PBT.
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	The substance is not PBT.
4-Nonylphenol, branched, ethoxylated	The substance is not PBT.
Aluminum powder (stabilized)	PBT assessment does not apply to inorganic substances.
Naphtha (petroleum), hydrodesulfurized heavy	Standard PBT studies are not applicable to UVCB substances.

vPvB assessment:

Diethylmethylbenzenediamine	The substance is not vPvB.
Poly(propylene glycol) bis(2-aminopropyl ether)	The substance is not vPvB.
Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	The substance is not vPvB.
4-Nonylphenol, branched, ethoxylated	The substance is not vPvB.
Aluminum powder (stabilized)	vPvB assessment does not apply to inorganic substances.
Naphtha (petroleum), hydrodesulfurized heavy	Standard vBvB studies are not applicable to UVCB substances.

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	UN2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyetheramines)
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	Marine Pollutant Diethylmethylbenzenediamine, Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate, 4-Nonylphenol, branched, ethoxylated
Special Precautions for User	Mixture contains small amount of flammable component (H226) stabilized aluminum powder. Ensure containers are kept away from ignition sources.

International Maritime Dangerous Goods (IMDG)

UN Number	UN2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyetheramines)
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	Marine Pollutant Diethylmethylbenzenediamine, Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate, 4-Nonylphenol, branched, ethoxylated
Special Precautions for User	Mixture contains small amount of flammable component (H226) stabilized aluminum powder. Ensure containers are kept away from ignition sources.

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

UN Number	UN2735
UN Proper Shipping Name	AMINES, LIQUID, CORROSIVE, N.O.S. (contains Polyetheramines)
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	Marine Pollutant Diethylmethylbenzenediamine, Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate, 4-Nonylphenol, branched, ethoxylated
Special Precautions for User	Mixture contains small amount of flammable component (H226) stabilized aluminum powder. Ensure containers are kept away from ignition sources.

SECTION 15: Regulatory Information

United States Regulations

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

Significant New Use Rule (TSCA Section 5):

64852-22-8	Glyceryl poly(oxypropylene) Triamine	Not Listed
9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	Not Listed
136210-30-5	Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Not Listed
127087-87-0	4-Nonylphenol, branched, ethoxylated	Listed
68479-98-1	Diethylmethylbenzenediamine	Listed
7429-90-5	Aluminum powder (stabilized)	Not Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Not Listed

Export Notification under TSCA Section 12(b):

64852-22-8	Glyceryl poly(oxypropylene) Triamine	Not Listed
9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether)	Not Listed
136210-30-5	Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate	Not Listed
127087-87-0	4-Nonylphenol, branched, ethoxylated	Listed
68479-98-1	Diethylmethylbenzenediamine	Not Listed
7429-90-5	Aluminum powder (stabilized)	Not Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Not Listed

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

SARA Section 313 Toxic Chemicals:

127087-87-0	4-Nonylphenol, branched, ethoxylated	Listed
7429-90-5	Aluminum powder (stabilized)	Listed

CERCLA:

64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Listed	100 Lbs. for RCRA D001

RCRA:

64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Listed	D001

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

7429-90-5	Aluminum powder (stabilized)	Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Listed

New Jersey Right to Know:

7429-90-5	Aluminum powder (stabilized)	Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Listed

New York Right to Know:

7429-90-5	Aluminum powder (stabilized)	Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	Listed

Pennsylvania Right to Know:

7429-90-5	Aluminum powder (stabilized)	Listed
64742-82-1	Naphtha (petroleum), hydrodesulfurized heavy	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: 3-2-1

HMIS: 3*-2-1

Initial Preparation Date: 08.17.2016

Revision date: 11.26.2025

Revision Notes:

Revision Date	Notes
2016-08-17	
2021-04-16	Internal Review
2022-06-01	Section 14/Shipping Name Edit
2025-11-26	Internal Review

End of Safety Data Sheet