

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 1 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A**SECTION 1: Identification****Product Identifier****Product Name:** Rhino 9700 Epoxy Resin - Part A**Product code:** 9700A**Additional information:** This SDS covers Light, Medium, Dark Gray Products**Recommended Use of the Product and Restriction on Use****Relevant Identified Uses:** EPOXY 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

9747 Businesspark Avenue

San Diego, CA 92131

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 irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1

Chronic aquatic hazard, category 2

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 2 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H317 May cause an allergic skin reaction
- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H332 Harmful if inhaled
- 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
- P261 Avoid breathing dust, fumes, gas, mist, vapors or spray.
- P264 Wash hands 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
- P302+P352 IF ON SKIN: Wash with plenty of water and soap.
- 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 or attention.
- P362 Take off contaminated clothing and wash it before reuse .
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing .
- P337+P313 If eye irritation persists: Get medical advice or attention.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
- P330 Rinse mouth
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P312 Call a POISON CENTER/doctor if you feel unwell .
- P391 Collect spillage
- 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: 28064-14-4 | 2-(chloromethyl)oxirane; Formaldehyde; Phenol | 45-55 |
| CAS Number: 25068-38-6 | 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 10-15 |
| CAS Number: 112945-52-5 | Silica, amorphous, fumed, cryst.-free | 5-10 |
| CAS Number: 13463-67-7 | Titanium Dioxide | 1-10 |
| CAS Number: 7631-86-9 | Silicon dioxide (amorphous) | 1-5 |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 3 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| | | |
|---------------------------|---|-------|
| CAS Number: 21645-51-2 | Aluminum hydroxide | 1-5 |
| CAS Number: 2425-79-8 | 1,4-bis(2,3 epoxypropoxy)butane | 1-5 |
| CAS Number: 64742-47-8 | Distillates (petroleum), hydrotreated light | 0.1-1 |
| CAS Number: 1675-54-3 | 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | 0.1-1 |
| CAS Number: 1333-86-4 | Bounded Carbon Black | 0.1-1 |

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:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

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. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Acute oral exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Acute inhalation exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea,

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 4 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Delayed Symptoms and Effects:

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

Immediate Medical Attention and Special Treatment

Specific Treatment:

Not determined or not applicable.

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). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 5 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10). Recommended storage temperature: 10-35°C (50-95°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 |
|-----------------------|---|-------------|--|
| NIOSH | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | REL-TWA: 6 mg/m ³ (Silica, amorphous (up to 19 hr)) |
| | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | IDLH: 3000 mg/m ³ (Silica, amorphous) |
| | Titanium Dioxide | 13463-67-7 | Level Limit Value: 0.2 mg/m ³ (LOQ - lowest feasible concentration) |
| | Titanium Dioxide | 13463-67-7 | IDLH: 5000 mg/m ³ |
| | Silicon dioxide (amorphous) | 7631-86-9 | REL-TWA: 6 mg/m ³ (up to 10 hrs.) |
| | Silicon dioxide (amorphous) | 7631-86-9 | IDLH: 3000 mg/m ³ |
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | REL-TWA: 350 mg/m ³ (up to 10 hr [petroleum distillates, naphtha]) |
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | Ceiling Limit: 1800 mg/m ³ ([15 min] petroleum distillates, naphtha) |
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | REL-TWA: 100 mg/m ³ (up to 10 hr [kerosene]) |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA-PEL: 0.1 mg/m ³ (in presence of polycyclic aromatic hydrocarbons (PAHs) - up to 10 hr) |
| | Bounded Carbon Black | 1333-86-4 | REL-TWA: 3.5 mg/m ³ (up to 10 hr) |
| | Bounded Carbon Black | 1333-86-4 | IDLH: 1750 mg/m ³ |
| OSHA | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | 8-Hour TWA: 0.8 mg/m ³ (Silica: Amorphous, including natural diatomaceous earth) |
| | Titanium Dioxide | 13463-67-7 | 8-Hour TWA-PEL: 15 mg/m ³ (total dust) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA-PEL: 0.8 mg/m ³ (Amorphous, including natural diatomaceous earth) |
| | Silicon dioxide (amorphous) | 7631-86-9 | TWA: 5 mg/m ³ (Particulates not otherwise regulated, Respirable fraction) |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 6 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|---------------------------|---|-------------|---|
| | Silicon dioxide (amorphous) | 7631-86-9 | TWA: 15 mg/m ³ (Particulates not otherwise regulated, Total dust) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 5 mg/m ³ (Inert or nuisance dust, respirable fraction) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 15 mg/m ³ (Inert or nuisance dust, total dust) |
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | 8-Hour TWA-PEL: 2000 mg/m ³ (500 ppm [aliphatic hydrocarbons]) |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA-PEL: 3.5 mg/m ³ |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA: 5 mg/m ³ (inert or nuisance dust, respirable fraction) |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA: 15 mg/m ³ (inert or nuisance dust, total dust) |
| | Bounded Carbon Black | 1333-86-4 | TWA: 5 mg/m ³ (particulates not otherwise regulated, respirable fraction) |
| | Bounded Carbon Black | 1333-86-4 | TWA: 15 mg/m ³ (particulates not otherwise regulated, total dust) |
| United States(California) | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | 8-Hour TWA: 10 mg/m ³ (Particulates not otherwise regulated, total dust) |
| | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | 8-Hour TWA: 5 mg/m ³ (Particulates not otherwise regulated, respirable fraction) |
| | Titanium Dioxide | 13463-67-7 | 8-Hour TWA-PEL: 10 mg/m ³ (particles not otherwise regulated, total dust) |
| | Titanium Dioxide | 13463-67-7 | 8-Hour TWA-PEL: 5 mg/m ³ (particles not otherwise regulated, respirable fraction) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA-PEL: 6 mg/m ³ (precipitated and gel) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA-PEL: 6 mg/m ³ (total dust) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA-PEL: 3 mg/m ³ (respirable dust) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA: 10 mg/m ³ (Particulates not otherwise regulated, Total dust) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA: 3 mg/m ³ (Particulates not otherwise regulated, Respirable fraction) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 10 mg/m ³ (Particulates not otherwise regulated, Total dust) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA-PEL: 5 mg/m ³ (Particulates not otherwise regulated, Respirable fraction) |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 7 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|-----------------------|---|-------------|--|
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | 8-Hour TWA-PEL: 1600 mg/m ³ (400 ppm [aliphatic hydrocarbons]) |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA-PEL: 3.5 mg/m ³ |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA: 5 mg/m ³ (particulates not otherwise regulated, respirable fraction) |
| | Bounded Carbon Black | 1333-86-4 | 8-Hour TWA: 10 mg/m ³ (particulates not otherwise regulated, total dust) |
| ACGIH | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | 8-Hour TWA: 3 mg/m ³ (Particles, insoluble or poorly soluble, N.O.S, respirable) |
| | Silica, amorphous, fumed, cryst.-free | 112945-52-5 | 8-Hour TWA: 10 mg/m ³ (Particles, insoluble or poorly soluble, N.O.S, inhalable) |
| | Titanium Dioxide | 13463-67-7 | TLV-TWA: 2.5 mg/m ³ (8 hr [finescale particles, respirable fraction]) |
| | Titanium Dioxide | 13463-67-7 | TLV-TWA: 0.2 mg/m ³ (8 hr [nanoscale particles, respirable fraction]) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA: 10 mg/m ³ ([TLA-TWA] Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles) |
| | Silicon dioxide (amorphous) | 7631-86-9 | 8-Hour TWA: 3 mg/m ³ ([TLA-TWA] Particles (insoluble or poorly soluble) not otherwise specified, respirable particles) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, respirable fraction) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 10 mg/m ³ (Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles (en-US)) |
| | Aluminum hydroxide | 21645-51-2 | 8-Hour TWA: 3 mg/m ³ (Particles (insoluble or poorly soluble) not otherwise specified, respirable particles (en-US)) |
| | Distillates (petroleum), hydrotreated light | 64742-47-8 | 8-Hour TWA: 200 mg/m ³ (Kerosene and jet-fuels [non-aerosol], as total hydrocarbon vapor) |
| | Bounded Carbon Black | 1333-86-4 | TLV-TWA: 3 mg/m ³ (inhalable particulate matter (8-Hour Exposure Limit)) |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 8 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|-----------------------|----------------------|------------|--|
| | Bounded Carbon Black | 1333-86-4 | TLV-TWA: 10 mg/m ³ (Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles (8-Hour Exposure Limit)) |
| | Bounded Carbon Black | 1333-86-4 | TLV-TWA: 3 mg/m ³ (Particles (insoluble or poorly soluble) not otherwise specified, respirable particles (8-Hour Exposure Limit)) |

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:

Safety glasses or goggles. 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. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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 | Liquid |
| Odor | Slightly sweet |
| Odor threshold | Not determined or not available. |
| pH | Not determined or not available. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 9 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin -Part A

| | |
|---|----------------------------------|
| Melting point/freezing point | Not determined or not available. |
| Initial boiling point/range | >200°C (392°F) |
| Flash point (closed cup) | >200°C (392°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 | Not determined or not available. |
| 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 | 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 oxidizing agents (strong acids and bases; halogenated compounds), metal alloys, caustics, Oxidizers, and epoxy hardeners in an uncontrolled condition.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced. In fire conditions, depending on temperature, air supply and presence of other materials, decomposition products can include, but are not limited to carbon, nitrogen and silica oxides, oxides of metals present in mixture (Section 3).

SECTION 11: Toxicological Information

Acute Toxicity

Assessment:

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 10 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

Product Data: No data available.

Substance Data:

| Name | Route | Result |
|--|----------------|---------------------------------------|
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | oral | LD50 Rat: >2000 mg/kg |
| | dermal | LD50 Rat: >2000 mg/kg |
| Titanium Dioxide | oral | LD50 Rat: > 2000 mg/kg |
| | inhalation | LC50 Rat: 5.09 mg/L (4 hr [aerosol]) |
| Silicon dioxide (amorphous) | oral | LD50 Rat: > 5000 mg/kg |
| | dermal | LD50 Rabbit: > 2000 mg/kg |
| Aluminum hydroxide | oral | LD50 Rat: > 2000 mg/kg |
| | inhalation | LC50 Rat: > 2.3 mg/L (4 hr [Aerosol]) |
| 1,4-bis(2,3 epoxypropoxy)butane | Dermal ATE | LD50 Rabbit: 1100 mg/kg |
| | oral | LD50 Rat: 1163 mg/kg |
| | Inhalation ATE | LC50 Rat: 1.5 mg/L (4 h [Dust/mist]) |
| Distillates (petroleum), hydrotreated light | oral | LD50 Rat: >5000 mg/kg |
| | dermal | LD50 Rabbit: >2000 mg/kg |
| | inhalation | LC50 Rat: >5.28 mg/L (4 hr [vapor]) |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | oral | LD50 rabbit: 19,800 mg/kg |
| | dermal | LD50 rabbit: 23,000 mg/kg |
| Bounded Carbon Black | oral | LD50 Rat: > 2000 mg/kg |
| | dermal | LD50 Rabbit: > 3000 mg/kg |

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

| Name | Result |
|--|-------------------------|
| 2-(chloromethyl)oxirane; Formaldehyde; Phenol | Causes skin irritation. |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Causes skin irritation. |
| Silica, amorphous, fumed, cryst.-free | Causes skin irritation. |
| 1,4-bis(2,3 epoxypropoxy)butane | Causes skin irritation. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | Causes skin irritation. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 11 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

Serious Eye Damage/Irritation

Assessment:

Causes serious eye irritation.

Product Data:

No data available.

Substance Data:

| Name | Result |
|--|--------------------------------|
| 2-(chloromethyl)oxirane; Formaldehyde; Phenol | Causes serious eye irritation. |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane | Causes serious eye irritation. |
| Silica, amorphous, fumed, cryst.-free | Causes serious eye irritation. |
| 1,4-bis(2,3 epoxypropoxy)butane | Causes serious eye irritation. |
| 2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisox irane | Cause serious eye irritation. |

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

| Name | Result |
|--|--------------------------------------|
| 2-(chloromethyl)oxirane; Formaldehyde; Phenol | May cause an allergic skin reaction. |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane | May cause an allergic skin reaction. |
| 1,4-bis(2,3 epoxypropoxy)butane | May cause an allergic skin reaction. |
| 2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisox irane | 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:

| Name | Species | Result |
|------------------|-----------------|---|
| Titanium Dioxide | Not applicable. | Airborne, unbound particles of respirable size are known to cause cancer. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 12 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Name | Species | Result |
|----------------------|-----------------|---|
| Bounded Carbon Black | Not applicable. | The carcinogenic classification only applies to airborne, unbound particles of respirable size. |

International Agency for Research on Cancer (IARC):

| Name | Classification |
|--|----------------|
| 2-(chloromethyl)oxirane; Formaldehyde; Phenol | Not Applicable |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane | Not Applicable |
| Silica, amorphous, fumed, cryst.-free | Group 3 |
| Titanium Dioxide | Group 2B |
| Silicon dioxide (amorphous) | Group 3 |
| Aluminum hydroxide | Not Applicable |
| 1,4-bis(2,3 epoxypropoxy)butane | Not Applicable |
| Distillates (petroleum), hydrotreated light | Not Applicable |
| 2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisox irane | Group 3 |
| Bounded Carbon Black | Group 2B |

National Toxicology Program (NTP):

| Name | Classification |
|--|----------------|
| 2-(chloromethyl)oxirane; Formaldehyde; Phenol | Not Applicable |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- epoxypropane | Not Applicable |
| Silica, amorphous, fumed, cryst.-free | Not Applicable |
| Titanium Dioxide | Not Applicable |
| Silicon dioxide (amorphous) | Not Applicable |
| Aluminum hydroxide | Not Applicable |
| 1,4-bis(2,3 epoxypropoxy)butane | Not Applicable |
| Distillates (petroleum), hydrotreated light | Not Applicable |
| 2,2'-[(1- methylethylidene)bis(4,1- phenyleneoxymethylene)]bisox irane | Not Applicable |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 13 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Name | Classification |
|----------------------|----------------|
| Bounded Carbon Black | 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: 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:

| Name | Result |
|---------------------------------------|-----------------------------------|
| Silica, amorphous, fumed, cryst.-free | 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:

| Name | Result |
|---|---|
| Distillates (petroleum), hydrotreated light | 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: Based on available data, the classification criteria are not met.

Product Data: No data available.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 14 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

Substance Data:

| Name | Result |
|--|---|
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Aquatic Invertebrates LC50 Daphnia magna: 2.7 mg/L (48 hours) |
| | Fish LC50 Oncorhynchus mykiss: 1.2 mg/L (96 hr) |
| | Aquatic Plants EC50 S. capricornutum: >11 mg/L (72 hr [growth rate]) |
| Titanium Dioxide | Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [mobility]) |
| | Aquatic Plants EC50 Raphidocelis subcapitata: > 100 mg/L (72 hr [growth rate]) |
| Silicon dioxide (amorphous) | Fish LC50 Pimephales promelas: > 5000 mg/L (96 hr [mortality]) |
| | Aquatic Invertebrates EC50 Daphnia magna: > 5000 mg/L (48 hr [mobility]) |
| | Aquatic Plants EC50 Desmodesmus subspicatus: >173.1 mg/L (72 hr [growth rate]) |
| Aluminum hydroxide | Aquatic Plants EC50 Raphidocelis subcapitata: 0.0169 mg/L (72 hr [growth rate]) |
| | Fish LC50 Oncorhynchus mykiss: 0.57 mg/L (96 hr) |
| | Aquatic Invertebrates EC50 Ceriodaphnia dubia: 0.72 mg/L (48 hr [mortality]) |
| 1,4-bis(2,3-epoxypropoxy)butane | Fish LC50 Danio rerio: 19.8 mg/L (96 hr [calculated]) |
| | Aquatic Invertebrates EC50 Daphnia magna: 75 mg/L (24 hr [mobility]) |
| | Aquatic Plants EC50 Pseudokirchneriella subcapitata: >160 mg/L (72 hr [mobility]) |
| Distillates (petroleum), hydrotreated light | Fish LC50 Lepomis macrochirus: 2.2 mg/L (96 hr) |
| | Aquatic Invertebrates EC50 Daphnia magna: 1.4 mg/L (48 hr) |
| | Aquatic Plants EC50 Pseudokirchneriella subcapitata: 6.7 mg/L (72 hr) |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | Fish LC50 Oncorhynchus mykiss: 1.2 mg/L (96 hr) |
| | Aquatic Invertebrates EC50 Daphnia magna: 1.7 mg/L (48 hr [mobility]) |
| | Aquatic Plants EC50 Scenedesmus capricornutum: 9.4 mg/L (72 hr [biomass]) |
| Bounded Carbon Black | Fish LC50 Danio rerio: > 1000 mg/L (96 hr) |
| | Aquatic Plants EC50 Desmodesmus subspicatus: > 10,000 mg/L (72 hr) |

Chronic (Long-Term) Toxicity

Assessment:

Toxic to aquatic life with long lasting effects.

Product Data: No data available.

Substance Data:

| Name | Result |
|-----------------------------|---|
| Titanium Dioxide | Aquatic Plants NOEC Raphidocelis subcapitata: >= 100 mg/L (72 hr [growth rate]) |
| Silicon dioxide (amorphous) | Aquatic Invertebrates NOEC Daphnia magna: 68 mg/L (21 d [mortality]) |
| | Aquatic Plants NOEC Desmodesmus subspicatus: >173.1 mg/L (21 d [growth rate]) |
| Aluminum hydroxide | Fish NOEC Pimephales promelas: 56.4766 mg/L (7 d [mortality]) |
| | Aquatic Invertebrates EC50 Ceriodaphnia dubia: 1.1 mg/L (7 d [reproduction]) |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 15 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Name | Result |
|---|--|
| Distillates (petroleum), hydrotreated light | Aquatic Invertebrates EC50 Daphnia magna: 0.81 mg/L (21 d) |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | Aquatic Invertebrates NOEC Daphnia magna: 0.3 mg/L (21d [survival, growth and reproduction]) |

Persistence and Degradability

Product Data: No data available.

Substance Data:

| Name | Result |
|--|---|
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Not readily biodegradable. 6 - 12% degradation, measured by CO2 evolution, after 28 days. |
| Titanium Dioxide | Persistence assessment based on biodegradability is not relevant for metals and its inorganic compounds such as this substance. |
| Silicon dioxide (amorphous) | The study does not need to be conducted because the substance is inorganic. |
| Aluminum hydroxide | Biotic degradation studies are irrelevant for inorganic substances. |
| 1,4-bis(2,3-epoxypropoxy)butane | The substance is not readily biodegradable (38% degradation in 28 days, measured by DOC removal). |
| Distillates (petroleum), hydrotreated light | Substance is considered to be inherently biodegradable in water. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | The substance is not readily biodegradable. 5% degradation, measured by O2 consumption, after 28 days. |
| Bounded Carbon Black | Bulk forms of carbon black are not biodegraded by microorganisms. |

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

| Name | Result |
|--|---|
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Low potential for bioaccumulation. BCF: 31 dimensionless (QSAR) |
| Titanium Dioxide | Bioaccumulation assessment using a classic BCF assessment is not considered relevant for essential elements/metals such as this substance. |
| Silicon dioxide (amorphous) | The study does not need to be conducted because the substance is inorganic. |
| Aluminum hydroxide | The available evidence shows the absence of aluminium biomagnification across trophic levels both in aquatic and terrestrial food chains. |
| 1,4-bis(2,3-epoxypropoxy)butane | Bioaccumulation is not expected based on a low octanol-water partition coefficient (log Pow = 0.269). |
| Distillates (petroleum), hydrotreated light | This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 16 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| Name | Result |
|---|--|
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | The substance has a low potential for bioaccumulation based on a calculated BCF (aquatic species) of 31 L/kg ww. |
| Bounded Carbon Black | Bioaccumulation is not expected to occur. |

Mobility in Soil

Product Data: No data available.

Substance Data:

| Name | Result |
|---|---|
| Titanium Dioxide | Mobility in soil assessment based on KOC/Kd values are not relevant for metals and its inorganic compounds such as this substance. |
| 1,4-bis(2,3 epoxypropoxy)butane | Mobile (Log Koc: 1.1) |
| Distillates (petroleum), hydrotreated light | This substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | The substance is predicted to be moderately mobile in soil with a moderate potential for adsorption to soil and sediment. Log Koc: 2.65 [QSAR] |

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:

| | |
|---|---|
| Titanium Dioxide | PBT assessment not applicable to inorganic substances such as this one. |
| Silicon dioxide (amorphous) | This substance is not PBT. |
| Aluminum hydroxide | This substance is not PBT. |
| 1,4-bis(2,3 epoxypropoxy)butane | The substance is not PBT. |
| Distillates (petroleum), hydrotreated light | This substance is a UVCB and does not contain constituents included in the SVHC candidate list as PBT at concentrations above 0.1%. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | The substance is not PBT. |
| Bounded Carbon Black | The substance is not PBT. |

vPvB assessment:

| | |
|---------------------------------|--|
| Titanium Dioxide | vPvB assessment not applicable to inorganic substances such as this one. |
| Silicon dioxide (amorphous) | This substance is not vPvB. |
| Aluminum hydroxide | This substance is not vPvB. |
| 1,4-bis(2,3 epoxypropoxy)butane | The substance is not vPvB. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 17 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| | |
|---|--|
| Distillates (petroleum), hydrotreated light | This substance is a UVCB and does not contain constituents included in the SVHC candidate list as vPvB at concentrations above 0.1%. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | The substance is not vPvB. |
| Bounded Carbon Black | 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 | Not regulated |
| UN Proper Shipping Name | Not regulated |
| UN Transport Hazard Class(es) | None |
| Packing Group | None |
| Environmental Hazards | None |
| 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 Maritime Dangerous Goods (IMDG)

| | |
|-------------------------------|---|
| UN Number | UN3082 |
| UN Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN) |
| UN Transport Hazard Class(es) | 9  |
| Packing Group | III |
| Environmental Hazards | Marine Pollutant |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 18 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin, - Part A

| | |
|-------------------------------------|--|
| 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 | UN3082 |
| UN Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN) |
| UN Transport Hazard Class(es) | 9  |
| Packing Group | III |
| 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. |

SECTION 15: Regulatory Information

United States Regulations

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

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

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

SARA Section 313 Toxic Chemicals: None of the ingredients are listed.

CERCLA:

| | | | |
|------------|---|--------|-----------------------|
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed | 100 lbs for RCRA D001 |
|------------|---|--------|-----------------------|

RCRA:

| | | | |
|------------|---|--------|------|
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed | D001 |
|------------|---|--------|------|

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

Massachusetts Right to Know:

| | | |
|-------------|---------------------------------------|--------|
| 112945-52-5 | Silica, amorphous, fumed, cryst.-free | Listed |
|-------------|---------------------------------------|--------|

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 19 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| | | |
|------------|---|--------|
| 13463-67-7 | Titanium Dioxide | Listed |
| 7631-86-9 | Silicon dioxide (amorphous) | Listed |
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed |
| 1333-86-4 | Bounded Carbon Black | Listed |

New Jersey Right to Know:

| | | |
|------------|---|--------|
| 13463-67-7 | Titanium Dioxide | Listed |
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed |
| 1333-86-4 | Bounded Carbon Black | Listed |

New York Right to Know:

| | | |
|------------|---|--------|
| 13463-67-7 | Titanium Dioxide | Listed |
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed |
| 1675-54-3 | 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane | Listed |

Pennsylvania Right to Know:

| | | |
|-------------|---|--------|
| 112945-52-5 | Silica, amorphous, fumed, cryst.-free | Listed |
| 13463-67-7 | Titanium Dioxide | Listed |
| 7631-86-9 | Silicon dioxide (amorphous) | Listed |
| 64742-47-8 | Distillates (petroleum), hydrotreated light | Listed |
| 1333-86-4 | Bounded Carbon Black | Listed |

California Proposition 65:

⚠WARNING: This product can expose you to chemicals including Titanium Dioxide and Silica, crystalline (airborne particles of respirable size) which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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. 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.

NFPA: 2-1-0

HMIS: 2-1-0

Initial Preparation Date: 03.30.2015

Revision date: 03.10.2023

Revision Notes:

| Revision Date | Notes |
|---------------|-----------------|
| 2015-03-30 | Internal Review |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.30.2015

Page 20 of 20

Revision date: 03.10.2023

Rhino 9700 Epoxy Resin - Part A

| | |
|------------|-----------------|
| 2019-02-14 | Internal Review |
| 2023-03-10 | Internal Review |

End of Safety Data Sheet

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 1 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B**SECTION 1: Identification****Product Identifier**

Product Name: Rhino 9700 Epoxy Hardener - Part B
Product code: 9700B

Recommended Use of the Product and Restriction on Use**Relevant Identified Uses:** Epoxy Curing Agent**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
9747 Businesspark Avenue
San Diego, CA 92131
858-450-0441
www.rhino linings.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 1B

Serious eye damage, category 1

Skin sensitization, category 1

Germ cell mutagenicity, category 2

Reproductive toxicity, category 2

Specific target organ toxicity - repeated exposure, category 2

Chronic aquatic hazard, category 4

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 2 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

Hazard statements:

- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H317 May cause an allergic skin reaction
- H341 Suspected of causing genetic defects.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H332 Harmful if inhaled
- H413 May cause long lasting harmful effects to aquatic life

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.
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- 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
- P273 Avoid release to the environment
- P310 Immediately call a POISON CENTER/doctor.
- 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/shower
- 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
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P405 Store locked up
- 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: 100-51-6 | Benzyl Alcohol | 20-30 |
| CAS Number: 135108-88-2 | Copolymer of benzenamine and formaldehyde, hydrogenated | 20-30 |
| CAS Number: 32610-77-8 | Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine | 15-25 |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 3 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| | | |
|-------------------------|----------------------|-----|
| CAS Number: 69-72-7 | Salicylic acid | 1-5 |
| CAS Number: 112-24-3 | Triethylenetetramine | 1-5 |
| CAS Number: 108-95-2 | Phenol | 1-5 |

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.

Delayed Symptoms and Effects:

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

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 4 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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

May cause 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:

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 5 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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 |
|---------------------------|----------------------|------------|---|
| WEEL | 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 (1 ppm) |
| ACGIH | Phenol | 108-95-2 | 8-Hour TWA: 5 ppm |
| NIOSH | Phenol | 108-95-2 | IDLH: 250 ppm |
| | Phenol | 108-95-2 | Ceiling Limit: 60 mg/m ³ (15.6 ppm [15-min]) |
| | Phenol | 108-95-2 | REL-TWA: 19 mg/m ³ (5 ppm [up to 10 hr]) |
| OSHA | Phenol | 108-95-2 | 8-Hour TWA-PEL: 19 mg/m ³ (5 ppm) |
| United States(California) | Phenol | 108-95-2 | 8-Hour TWA-PEL: 19 mg/m ³ (5 ppm) |

Biological Limit Values:

| Country (Legal Basis) | Substance | Identifier | Determinant | Specimen | Sampling time | Permissible limits |
|-----------------------|-----------|------------|-------------|---------------------|---------------|--------------------|
| ACGIH | Phenol | 108-95-2 | Phenol | Creatinine in urine | End of shift. | 250 mg/g |

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 6 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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 | Liquid |
| Odor | Ammoniacal |
| Odor threshold | Not determined or not available. |
| pH | Alkaline |
| Melting point/freezing point | Not determined or not available. |
| Initial boiling point/range | >222°C (431°F) |
| Flash point (closed cup) | >104°C (219°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 | Not determined or not available. |
| 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. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 7 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| | |
|----------------------|----------------------------------|
| 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:

Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

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

Avoid confined spaces, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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 |
|---|------------|---------------------------------------|
| Benzyl Alcohol | oral | LD50 Rat: 1045 mg/kg |
| | inhalation | LC50 Rat: 4.178 mg/L (4 hr (aerosol)) |
| | dermal | LD50 Rabbit: >2000 mg/kg |
| Copolymer of benzenamine and formaldehyde, hydrogenated | oral | LD50 Rat: 300 mg/kg |
| | dermal | LD50 Rabbit: > 1000 mg/kg |
| Salicylic acid | oral | LD50 Rat: 891 mg/kg |
| | dermal | LD50 Rat: > 2000 mg/kg |
| Triethylenetetramine | oral | LD50 Rat: 2500 to 4340 mg/kg |
| | dermal | LD50 Rabbit: 550 to 805 mg/kg |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 8 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| Name | Route | Result |
|--------|------------|---------------------------------------|
| Phenol | oral | LD50 Mouse: 270 mg/kg |
| | dermal | LD50 Rabbit: 630 mg/kg |
| | inhalation | LC50 Rat: 0.5 mg/L (4 hr [dust/mist]) |

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:

No data available.

Substance Data:

| Name | Result |
|---|---------------------------|
| Copolymer of benzenamine and formaldehyde, hydrogenated | Causes severe skin burns. |
| Triethylenetetramine | Causes severe skin burns. |
| Phenol | Causes severe skin burns. |

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

| Name | Result |
|---|--------------------------------|
| Benzyl Alcohol | Causes serious eye irritation. |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Causes serious eye damage. |
| Salicylic acid | Causes serious eye damage. |
| Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine | Causes serious eye irritation. |
| Triethylenetetramine | Causes serious eye damage. |
| Phenol | Causes serious eye damage. |

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

| Name | Result |
|---|--------------------------------------|
| Copolymer of benzenamine and formaldehyde, hydrogenated | May cause an allergic skin reaction. |
| Triethylenetetramine | May cause an allergic skin reaction. |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 9 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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 |
|---|----------------|
| Benzyl Alcohol | Not Applicable |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Not Applicable |
| Salicylic acid | Not Applicable |
| Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine | Not Applicable |
| Triethylenetetramine | Not Applicable |
| Phenol | Group 3 |

National Toxicology Program (NTP):

| Name | Classification |
|---|----------------|
| Benzyl Alcohol | Not Applicable |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Not Applicable |
| Salicylic acid | Not Applicable |
| Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine | Not Applicable |
| Triethylenetetramine | Not Applicable |
| Phenol | Not Applicable |

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment:

Suspected of causing genetic defects.

Product Data:

No data available.

Substance Data:

| Name | Result |
|--------|---------------------------------------|
| Phenol | Suspected of causing genetic defects. |

Reproductive Toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product Data:

No data available.

Substance Data:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 10 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| Name | Result |
|----------------|---|
| Salicylic acid | Suspected of damaging 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: No data available.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment:

May cause damage to organs through prolonged or repeated exposure.

Product Data:

No data available.

Substance Data:

| Name | Result |
|---|--|
| Copolymer of benzenamine and formaldehyde, hydrogenated | May cause damage to kidneys through prolonged or repeated oral exposure. |
| Phenol | May cause damage to organs (kidney, liver, skin, 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: 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.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

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

Product Data: No data available.

Substance Data:

| Name | Result |
|---|---|
| Benzyl Alcohol | Fish LC50 Pimephales promelas: 460 mg/L (96 hr) |
| | Aquatic Invertebrates EC50 Daphnia magna: 230 mg/L (48 hr) |
| | Aquatic Plants EC50 Pseudokirchnerella subcapitata: 770 mg/L (72 hr [growth]) |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Fish LC50 Poecilia reticulata: 63 mg/L (96 hr) |
| | Aquatic Invertebrates EC50 Daphnia magna: 15.4 mg/L (48 hr [mobility]) |
| | Aquatic Plants EC50 Desmodium subspicatus: 43.94 mg/L (72 hr [growth rate]) |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 11 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| Name | Result |
|----------------------|---|
| Salicylic acid | Aquatic Invertebrates EC50 Daphnia magna: 870 mg/L (48 hr [mobility]) |
| | Fish LC50 Pimephales promelas: 1370 mg/L (96 hr) |
| Triethylenetetramine | Aquatic Invertebrates EC50 Daphnia magna: 31.1 mg/L (48 hr [mobility]) |
| | Fish LC50 Pimephales promelas: 330 mg/L (96hr) |
| | Aquatic Plants EC50 Raphidocelis subcapitata: 20 mg/L (72 hr [growth rate]) |
| Phenol | Fish LC50 Oreochromis mossambicus: 28.49 mg/L (96 hr) |
| | Aquatic Invertebrates LC50 Daphnia magna: 12.9 mg/L (48 hr [mobility]) |
| | Aquatic Plants EC50 Algae: 217.6 mg/L (72 hr [growth rate]) |

Chronic (Long-Term) Toxicity

Assessment:

May cause long lasting harmful effects to aquatic life.

Product Data: No data available.

Substance Data:

| Name | Result |
|----------------------|---|
| Benzyl Alcohol | Fish NOEC Freshwater fish: 48.897 mg/L (30 d [QSAR]) |
| | Aquatic Invertebrates NOEC Daphnia magna: 51 mg/L (21 d [reproduction]) |
| Salicylic acid | Aquatic Invertebrates NOEC Daphnia magna: 10 mg/L (21 d) |
| Triethylenetetramine | Aquatic Invertebrates EC50 Daphnia magna: > 3.2 - < 10 mg/L (21 d [immobilization]) |
| Phenol | Fish LC50 Oncorhynchus mykiss: 0.15 mg/L (27 d) |
| | Aquatic Invertebrates EC50 Daphnia magna: 0.48 mg/L (21 d [reproduction]) |

Persistence and Degradability

Product Data: No data available.

Substance Data:

| Name | Result |
|---|---|
| Benzyl Alcohol | The substance is readily biodegradable. 92 - 96% degradation, measured by BOD, after 14 days. |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Under test conditions no biodegradation observed |
| Salicylic acid | The substance is readily biodegradable. 88.1% degradation in water, measured by BOD, after 14 days. |
| Triethylenetetramine | No degradation was observed during the test period. The substance is not readily biodegradable. |
| Phenol | The substance is readily biodegradable. 86% degradation, measured by O2 consumption, after 28 days. |

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

| Name | Result |
|----------------|--|
| Benzyl Alcohol | Bioaccumulation is not expected. BCF (aquatic species): 1.37 L/kg ww |

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 12 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| Name | Result |
|---|---|
| Copolymer of benzenamine and formaldehyde, hydrogenated | The substance has been shown to have a negligible potential for bioaccumulation, BCF (aquatic species): > 18 - < 22 |
| Salicylic acid | Low bioaccumulative potential (log Kow: 2.26). |
| Triethylenetetramine | The substance has a low potential to bioaccumulate based on the log Pow of -2.90 to -2.08. |
| Phenol | Bioaccumulation is not expected. BCF (aquatic species): 17.5 dimensionless |

Mobility in Soil

Product Data: No data available.

Substance Data:

| Name | Result |
|---|--|
| Benzyl Alcohol | The substance has low potential for adsorption to soil and sediment. Koc at 20 °C: 15.7 |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Substance is slightly mobile with high potential for adsorption to soil and sediment [Log Koc: 3.81]. |
| Salicylic acid | The substance is mobile in soil with a low potential for adsorption to soil and sediment. Koc at 20 °C: 35 |
| Triethylenetetramine | The substance is slightly mobile in soil with a high potential for adsorption to soil and sediment. Log Koc: 3.5 |
| Phenol | The substance is mobile in soil with a low potential for adsorption to soil and sediment. Koc at 20 °C: 82.8 |

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:

| | |
|---|---------------------------|
| Benzyl Alcohol | The substance is not PBT. |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Substance is not PBT. |
| Salicylic acid | The substance is not PBT. |
| Phenol | The substance is not PBT. |

vPvB assessment:

| | |
|---|----------------------------|
| Benzyl Alcohol | The substance is not vPvB. |
| Copolymer of benzenamine and formaldehyde, hydrogenated | Substance is not vPvB. |
| Salicylic acid | The substance is not vPvB. |
| Phenol | The substance is not vPvB. |

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 13 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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 | Not regulated |
| UN Proper Shipping Name | Not regulated |
| UN Transport Hazard Class(es) | None |
| Packing Group | None |
| Environmental Hazards | None |
| 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 Maritime Dangerous Goods (IMDG)

| | |
|-------------------------------|--|
| UN Number | Not regulated |
| UN Proper Shipping Name | Not regulated |
| UN Transport Hazard Class(es) | None |
| Packing Group | None |
| Environmental Hazards | None |
| 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 | Not regulated |
|-----------|---------------|

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 14 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

| | |
|--------------------------------------|--|
| UN Proper Shipping Name | Not regulated |
| UN Transport Hazard Class(es) | None |
| Packing Group | None |
| Environmental Hazards | None |
| 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. |

SECTION 15: Regulatory Information

United States Regulations

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

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances:

| | | |
|----------|--------|--------|
| 108-95-2 | Phenol | Listed |
|----------|--------|--------|

SARA Section 313 Toxic Chemicals:

| | | |
|----------|--------|--------|
| 108-95-2 | Phenol | Listed |
|----------|--------|--------|

CERCLA:

| | | | |
|----------|--------|--------|----------|
| 108-95-2 | Phenol | Listed | 1000 lbs |
|----------|--------|--------|----------|

RCRA:

| | | | |
|----------|--------|--------|------|
| 108-95-2 | Phenol | Listed | U188 |
|----------|--------|--------|------|

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

Massachusetts Right to Know:

| | | |
|----------|----------------------|--------|
| 100-51-6 | Benzyl Alcohol | Listed |
| 112-24-3 | Triethylenetetramine | Listed |
| 108-95-2 | Phenol | Listed |

New Jersey Right to Know:

| | | |
|----------|----------------------|--------|
| 112-24-3 | Triethylenetetramine | Listed |
| 108-95-2 | Phenol | Listed |

New York Right to Know:

| | | |
|----------|----------------------|--------|
| 112-24-3 | Triethylenetetramine | Listed |
| 108-95-2 | Phenol | Listed |

Pennsylvania Right to Know:

| | | |
|----------|----------------------|--------|
| 100-51-6 | Benzyl Alcohol | Listed |
| 112-24-3 | Triethylenetetramine | Listed |
| 108-95-2 | Phenol | Listed |

California Proposition 65: None of the ingredients are listed.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.23.2015

Page 15 of 15

Revision date: 03.07.2023

Rhino 9700 Epoxy Hardener - Part B

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. 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.

NFPA: 2-1-0

HMIS: 2*-1-0

Initial Preparation Date: 03.23.2015

Revision date: 03.07.2023

Revision Notes:

| Revision Date | Notes |
|---------------|-----------------|
| 2015-03-23 | Internal Review |
| 2019-02-22 | Internal Review |
| 2023-03-07 | Internal Review |

End of Safety Data Sheet