

PRODUCT NAME(S): Rhino™ E200B Epoxy Hardener (Part B)

SECTION 1 – IDENTIFICATION

Manufacturer's Info:
Rhino Linings Corporation
9747 Businesspark Avenue
San Diego, CA, 92131

Product name: Rhino™ E200B Epoxy Hardener (Part B)
Chemical Name: Mixture
Chemical Family: Epoxy Hardener

Information phone: (858) 450 0441
Emergency contact: CHEMTREC (800) 424 9300

SECTION 2 – HAZARD(S) IDENTIFICATION

OSHA Hazard Communication Standard:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

GHS-Label Elements: **Signal Word:**
DANGER

Pictogram(s):



GHS 06



GHS 05



GHS 08



GHS 09



GHS 07

Classification of the substance or mixture:

| Hazard Class | Category | Hazard Statement Codes | Hazard Statements |
|---|----------|------------------------|---|
| Acute toxicity, Oral | 4 | H303 | Harmful if swallowed |
| Acute Toxicity, Dermal | 4 | H312 | Harmful in contact with skin |
| Acute Toxicity, Inhalation | 3 | H331 | Toxic if inhaled |
| Skin corrosion / Irritation | 1B | H314 | Causes severe skin burns and eye damage. |
| Serious eye damage / Eye irritation | 1 | H318 | Causes serious eye damage |
| Skin Sensitization | 1 | H317 | May cause an allergic skin reaction |
| Reproductive toxicity | 2 | H361 | Suspected of damaging fertility and the unborn child |
| Specific target organ toxicity, single exposure | 3 | H335 | May cause respiratory irritation |
| Specific target organ toxicity, repeated exposure | 2 | H373 | May cause damage to central nervous system through prolonged or repeated exposure by skin absorption. |
| Aquatic Hazard, Acute | 1 | H400 | Very toxic to aquatic life |
| Aquatic Hazard, Long term | 1 | H410 | Very toxic to aquatic life with long lasting effects |
| Flammable Liquids | 4 | H227 | Combustible liquid |

Precautionary Statements:

| | | |
|-------------|--------------------|--|
| Prevention: | P201 | Obtain special instructions before use. |
| | P202 | Do not handle until all safety precautions have been read and understood. |
| | P281 | Use personal protective equipment as required. |
| | P260 | Do not breathe mist, vapors, spray. |
| | P270 | Do not eat, drink, and smoke when using this product. |
| | P280 | Wear protective gloves/ protective clothing / eye protection/ face protection. |
| | P285 | In case of inadequate ventilation wear respiratory protection. |
| | P264 | Wash exposed area with plenty of water and soap thoroughly after handling. |
| | P272 | Contaminated work clothing should not be allowed out of the workplace. |
| | P271 | Use only outdoors or in a well-ventilated area. |
| | P273 | Avoid release to the environment. |
| | P210 | Keep away from flames and hot surfaces. No smoking. |
| Response: | P301 + P330 + P312 | IF SWALLOWED: Rinse mouth. Call a POISON CENTER or physician if you feel unwell. |
| | P331 | Do not induce vomiting. |
| | P303 + P361 + P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| | P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| | P363 | Wash contaminated clothing 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. |

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| | P310 | Immediately call a POISON CENTER or doctor/ physician. |
| | P304 + P340 + P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. |
| | P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| | P391 | Collect spillage. |
| | P370 + P378 | In case of fire: Use alcohol-resistant foam, dry chemical or carbon dioxide for extinction. |
| Storage: | P403 + P233 + P235 P405 | Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. |
| Disposal: | P501 | Dispose of contents/container to hazardous or special waste collection point in accordance with local/regional/national/international regulations. |

Hazards not otherwise classified: No specific dangers known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Components | CAS # | Concentration, % |
|---|--------------|------------------|
| Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | 186321-96-0 | 60 - 100 |
| Benzyl Alcohol | 100-51-6 | 13 – 30 |
| Confidential Component 1 | Trade Secret | 3 - 7 |
| Confidential Component 2 | Trade Secret | 3 - 7 |
| Confidential Component 3 | Trade Secret | 1 - 5 |
| 4,4'-Isopropylidenediphenol | 80-05-7 | 1 - 5 |

SECTION 4 – FIRST-AID MEASURES
Description of First Aid measures:

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|--------------------|--|
| Inhalation: | Immediate medical attention required. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person should be kept under medical surveillance for 48 hours. |
| Skin: | Immediate medical attention required. Chemical burns must be treated promptly by a physician or dermatologist. Wash material off of the skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes immediately and wash them before reuse. For severe exposures, immediately get under safety shower and begin rinsing. |
| Eye: | Immediate medical attention required. Chemical burns must be treated promptly by a physician or ophthalmologist. Rinse cautiously with water for several minutes, especially under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Do not rub eyes in order to prevent cornea injury. |
| Ingestion: | Immediate medical attention required. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Remove dentures if any. If the exposed person is conscious, rinse mouth with water and then give plenty of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Do not induce vomiting unless directed to do so by medical personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. |

Most important symptoms/effects, acute and delayed: See Section 11 for details.

General advice for First Aid responders: No action should be taken involving any personal risk or without suitable training. If potential for exposure exist refer to Section 8 for specific personal protective equipment. Show this SDS to physician.

Note to physician: Specific antidotes or neutralizers do not exist. Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Symptoms of poisoning may even occur after several hours. Recommended medical monitoring for at least 48 hours.

Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed.

Skin: This product contains component that is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.

Ingestion: Inducing vomiting can be contraindicated because of the irritating nature of the chemical.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media: Those recommended for Class B fuels: Alcohol-resistant foam, dry chemical or carbon dioxide fire extinguishers.

Unsuitable extinguishing media: Direct water stream may cause frothing, splattering of burning material, violent steam generation or eruption and spreading of fire.

Specific hazards arising from the chemical: If heated above its flash point, product will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below normal flash point. Keep away from extreme heat or open flame. Fire in vicinity poses risk of pressure build-up and rupture. Containers at risk from fire should be cooled with water and, if possible, removed from the danger area. Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.
Hazardous combustion products: carbon dioxide, carbon monoxide, nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules.

Special Protective Equipment and Precautions for fire-fighters: Wear NIOSH or OSHA approved self-contained breathing apparatus in positive pressure mode with full face piece and full protective gear. Isolate the scene by removing all persons from the incident area. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. No action should be taken involving any personal risk or without suitable training.

Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary and unprotected personnel from entering. Ensure adequate ventilation/exhaust extraction. Do not breath vapors or mist during clean up. Use protective equipment as described in Section 8. Do not touch or walk through spilled material, spilled material may cause a slipping hazard.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Inform the relevant authorities if the product has caused environmental pollution. Water polluting material. Harmful to the environment. See Section 12 for more details.

Methods and materials for containment and cleaning up: Remove mechanically; cover the remainder with non-combustible absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth). Following absorption, transfer into properly labeled chemical waste containers. If necessary, repeat application of absorbent material until all liquid has been removed from the surface. Cover container, but do not seal, and remove from work area. Keep in a well ventilated area. If necessary, repeat application of absorbent material until all liquid has been removed from the surface. Wash the spill site with decontamination solution or with soap and water. Scrubbing the surface with a broom or brush helps the decontamination solution to penetrate into porous surfaces. Wait at least 15 minutes after first application. Cover the area again with absorbent material and shovel this into chemical waste container. Cover container, but do not seal, and remove from work area. Keep in a well ventilated area. After 72 hours, seal the container, and properly dispose of the waste material and any contaminated equipment (i.e., broom or brush) in accordance with existing federal, state and local regulations.

For major spills: Stop leak if without risk. Move containers from spill area. Remove ignition sources. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or contain and collect with an absorbent material as described in the previous paragraph.
For minor spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly with soap and water to remove residual contamination. Never return spills to original containers for re-use.

Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, see Section 1 for the Emergency contact; for further disposal measures, see Section 13.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Protect chemical from atmospheric moisture. Avoid prolonged exposure to heat and air. Keep away from sources of ignition. Do not reseal if contamination is suspected.

Use adequate ventilation to keep airborne levels below the exposure limits. Do not inhale vapors and mists. Wear respiratory protection if material is heated, mixed, sprayed or used in a confined space. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash hands thoroughly after handling. Hands and/or face should be washed before eating, drinking and smoking and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in original or approved alternative container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.

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Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect it against physical damage and moisture. Normal temperature and pressures do not affect the material. Keep liquid away from heat, sparks and flame. Do not cut, drill, grind, weld or perform similar operations on or near containers. Use appropriate containment to avoid environmental contamination.

Storage stability: Stable under normal conditions.

Storage temperature: 65 - 80°F (18 – 27°C)

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Employees and consumers should be warned of health risks associated with product use. See Section 8 for additional information on hygiene measures.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters/Occupational exposure limit values: Not available for mixture. Not available for components. See Section 15 for additional information.

Appropriate engineering controls: Good local and general ventilation should be sufficient to control worker exposure to airborne contaminants below recommended exposure limits. Local exhaust may be required in some areas.

Personal protective equipment:

Eye/face protection:

When directly handling liquid product, eye protection is required. Examples of eye protection include safety glasses and goggles or full face shield when there is a greater risk of splash. Contact lenses should not be worn when working with chemicals.

Skin/body protection:

Avoid contact with skin. Impervious gloves (nitrile butyl rubber, neoprene or PVC) should be worn always when working with this product. Body should be covered with appropriate clothing (apron, arm covers or full body suit) depending on the task being performed and the risks involved. Protective clothing should be selected and used in accordance with “Guidelines for the Selection of Chemical Protective Clothing” published by ACGIH. Wash contaminated clothing before reuse. Store work clothing separately. Appropriate footwear should be also selected based on the task being performed and the risks involved. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

Respiratory protection:

Use local or general ventilation to control exposures below applicable exposure limits. When ventilation is inadequate, use either an atmosphere supplying respirator or NIOSH or OSHA approved air-purifying respirator for organic vapors. Respirator must be properly fitted and its selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Additional Protective Measures: Educate and train employees in safe handling of this product. Follow all label instructions. As a general hygiene practice, wash hands and face after use. Emergency eyewash fountains and safety shower should be in close proximity as a matter of good practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| Appearance: | Light Yellow Liquid |
| Odor: | Irritating, Ammonia-like |
| Odor threshold: | Not available |
| pH: | 10 - 12 [Cone. (% w/w): 10%] |
| Melting point/ freezing point: | Not available |
| Initial boiling point and boiling range: | 135°C (275°F) |
| Flash point: | 76°C (168.8°F) (Pensky-Martens Closed Cup)] |
| Evaporation rate: | Not available |
| Flammability (solid, gas): | Not applicable |
| Upper/ lower flammability or explosive limits: | Not available |
| Vapor pressure: | Not available |
| Vapor density: | Not available |
| Relative density: | 1.01 g/cm ³ [20°C (68°F)] |
| Solubility (water): | Not available |
| Partition coefficient n-octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | >150°C (>302°F) |
| Viscosity: | 700 to 2000 mPa·s (700 to 2000 cP) |

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Hazardous Polymerization: Product will not undergo hazardous polymerization.
 Corrosion to metals: Not known.
 Oxidizing properties: Based on its structural properties the product is not classified as oxidizing.
 Formation of flammable gases: Does not form flammable gases in the presence of water.

Chemical stability: Stable under recommended storage conditions. Product is hygroscopic; contamination with moisture will negatively affect product performance.

Conditions to avoid: Unintentional contact with moisture, excessive heat, open flame and sparks.

Incompatible materials: Strong oxidizing agents. Water, bases, acids, copper, aluminum and zinc alloys.

Hazardous decomposition products: Depend upon temperature, air supply and presence of other materials. Can include, but are not limited to carbon dioxide, carbon monoxide, nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, Skin and Eye Contact, Ingestion.

Symptoms of exposure:

Acute toxicity:

Oral: Harmful if swallowed. May cause burns to mouth, throat and stomach. Adverse symptoms may include abdominal pain, nausea and diarrhea.

Dermal: Harmful in contact with skin. Adverse symptoms may include pain or irritation, redness, blistering and burns.

Inhalation: Can cause severe eye, skin and respiratory system irritation. Adverse symptoms may include nausea, headache and difficulties with breathing.

Skin corrosion / irritation:

Corrosive! Contact may result in pain, severe local redness, burns and tissue damage. Prolonged contact may result in absorption of harmful amounts. A more severe response may be expected if skin is abraded (scratched or cut).

Serious eye damage / eye irritation:

Causes serious eye damage. Adverse symptoms may include tearing, redness, swelling, burning and blindness.

Specific target organ toxicity, single exposure: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Aspiration hazard: Not an aspiration hazard.

Chronic toxicity:

Respiratory and Skin Sensitizer:

This material contains components that are reported to be a skin sensitizer.

Germ cell mutagenicity:

This product does not contain component(s) suspected to have mutagenic effect.

Carcinogenicity:

Based on available information, this product does not contain component(s) known or reported to be carcinogenic by any reference by IARC, NTP, EPA, OSHA, ACGIH.

Reproductive toxicity:

This product contains component(s) reported to be suspected human reproductive toxicant.

Specific target organ toxicity, repeated exposure: N/A

Medical conditions aggravated by overexposure: N/A

Toxicity test results: Not available for mixture. Results for components:

| Components | Test Results |
|---|---|
| Fatty acids, tall-oil, reaction products with bisphenol A, epichlorohydrin, glycidyl tolyl ether and triethylenetetramine | <u>Acute Toxicity</u> |
| | Oral LD50 (Rat): >2000 mg/kg (OECD 423) |
| | Dermal LD50 (Rabbit): >2000 mg/kg (OECD 402) |
| | Inhalation LC50 (Rat): No data available |
| | Skin corrosion/irritation (Human skin model): Irritant (OECD 439- InVitro Skin Irritation - Reconstructed Human Epidermis Test Method) |
| | Serious eye damage/eye irritation (Rabbit): Severe irritant (OECD Bovine Corneal Opacity and Permeability Test Method for Identifying Ocular Corrosives and Severe Irritants) |
| | STOT, SE: No data available |
| | Aspiration hazard: No data available |
| | <u>Chronic Toxicity</u> |
| | Sensitization, skin and respiratory (mouse): skin sensitizer |
| | Germ cell mutagenicity: Not genotoxic |
| | Carcinogenicity: No data available |
| | Reproductive toxicity: Negative |
| | STOT, RE: Oral (Rat, Male, Female): NOAEL:1000 mg/kg/d (OECD 422 Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test, Sub-acute) |

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| Benzyl Alcohol | <p><u>Acute Toxicity</u> Oral LD50 (Rat): 1620 mg/kg mg/kg (OECD 401) Dermal LD50 (Rabbit): No data available Inhalation LC50 (Rat), Dust and mist: >4178 mg/m³ (OECD 403) Skin corrosion/irritation (Rabbit): Non-irritant (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit): Irritant (OECD Test Guideline 405) STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory (Guinea pig): Not sensitizing (Guinea pig maximization test) (OECD Test Guideline 406) Germ cell mutagenicity: Not genotoxic Carcinogenicity: Oral (Rat, Male, Female), 103 weeks; 5 days per week :NOAEL: 400 mg/kg - Negative (OECD 453) Reproductive toxicity: Negative STOT, RE: Oral (Rat, Male, Female): NOAEL: 400 mg/kg Sub-chronic Inhalation (Rat, Male, Female), 28-days or 14-days, Dusts and mists: NOEC: 1072 mg/m³ (OECD 412, Study Sub-chronic)</p> |
| Confidential Component 1, CAS #: Trade Secret | <p><u>Acute Toxicity</u> Oral LD50 (Rat): 410 mg/kg mg/kg (OECD 401) Dermal LD50 (Rat): >1000 mg/kg (OECD 402) Inhalation LC50 (Rat), Vapor: 24.8 mg/L (OECD 403) Skin corrosion/irritation (Rabbit): Corrosive (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit): No data available STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory (Guinea pig): Sensitizing (Guinea pig maximization test) (OECD Test Guideline 406) Germ cell mutagenicity: Not genotoxic Carcinogenicity: No data available Reproductive toxicity: Negative STOT, RE: Oral (Rat, Male, Female), 28-days: NOAEL: 50 mg/kg/d (OECD 407, Sub-acute) Reproductive toxicity: The results of animal studies suggest a fertility impairing effect. Rat, Oral / Effects on newborn: growth statistics (e.g., reduced weight gain). Suspected human reproductive toxicant.</p> |
| Confidential Component 2, CAS #: Trade Secret | <p><u>Acute Toxicity</u> Oral LD50 (Rat, male): 2169 mg/kg (OECD 401) Dermal LD50 (Rat, male): >971 mg/kg (unknown) Inhalation LC50 (Rat): No data available Skin corrosion/irritation (Rabbit): Corrosive (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit): Corrosive (OECD Test Guideline 405) STOT, SE: No data available Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Sensitization, skin and respiratory (Guinea pig): Not sensitizing (Guinea pig maximization test) (OECD Test Guideline 406) Germ cell mutagenicity: Not genotoxic Carcinogenicity: No data available Reproductive toxicity: Negative STOT, RE: brain; Category 2 Oral (Rat/Male, Female): NOEL: 15 mg/kg (OECD 422 Combined Repeated Dose Toxicity Study with the Reproduction/ Developmental Toxicity Screening Test, Sub-acute)</p> |
| 4,4'-Isopropylidenediphenol | <p><u>Acute toxicity</u> LD50 Oral - Rat - male and female - > 2,000 - 5,000 mg/kg (OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 6 h - 170 mg/m³ LD50 Dermal - Rabbit - 6,400 mg/kg Skin corrosion/irritation: Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes – Rabbit Result: Severe eye irritation - 24 h Aspiration hazard: No data available</p> <p><u>Chronic Toxicity</u> Respiratory or skin sensitization: No data available Germ cell mutagenicity: Ames test (S. typhimurium) Result: negative; Mouse - male and female: Result: negative Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, ACGIH and OSHA: Reproductive toxicity: Suspected of damaging fertility or the unborn child. STOT, SE: Inhalation - May cause respiratory irritation. STOT, RE: Rat - male and female - Oral - Lowest observed adverse effect level - 600 mg/kg; Stomach - Irregularities - Based on Human Evidence To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.</p> |

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

Persistence and degradability: Not known.

Bioaccumulative potential: Not known.

Mobility in soil: Not known.

Other adverse effects: Very toxic to aquatic life with long lasting effects. Do not allow product to reach ground water, water course or sewage system. Presents danger to drinking water if even small quantities leak into the ground.

Ecotoxicity test results: Not available.




SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: The generation of waste should be avoided or minimized wherever possible. **Do not discharge into any sewers, on the ground, or into any body of water.** Spill cleanup residues may still be subject to RCRA storage and disposal requirements. All disposal practices must be in compliance with local, state and federal regulations via licensed waste disposal contractor.

Container disposal: Even after emptying, container may retain residues. Empty containers should be completely drained and safely stored until appropriately reconditioned or disposed through licensed contractor in accordance with government regulations.

This material and its container must be disposed of in a safe way.

SECTION 14 – TRANSPORT INFORMATION

| | Land transport, U.S. DOT | Sea transport, IMDG: | Air transport, IATA/ICAO: |
|------------------------------------|---|--|---|
| UN number: | UN 2735 | UN 2735 | UN 2735 |
| UN proper shipping name: | Amines, liquid, corrosive, n.o.s., | Amines, liquid, corrosive, n.o.s., | Amines, liquid, corrosive, n.o.s., |
| Transport hazard class(es): | 8 | 8 | 8 |
| Packing group: | II | II | II |
| Hazard Label |  |  |  |
| Environmental Hazard: | Yes, Marine pollutant | Yes, Marine pollutant Product contains environmentally hazardous substances: Polyoxypropyleneamines, Nonylphenol | Yes, Marine pollutant Product contains environmentally hazardous substances: Polyoxypropyleneamines, Nonylphenol |
| Special precautions: | The marine pollutant mark is not required when transported on inland waterways in sizes of ;;5 L or ;;5 kg or by road, rail, or inland air in non-bulk sizes. | The marine pollutant mark is not required when transported in sizes of ;;5 L or ;;5 kg. Emergency schedules (EmS) F-A S-8 | The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 1L Packaging instructions: 851 Cargo Aircraft Only Quantity limitation: 30 L Packaging instructions: 855 |

SECTION 15 – REGULATORY INFORMATION

U.S. Regulations:

OSHA HCS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29CFR 1910.1200.

TSCA Regulations:

All components of this product are listed or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

EPCRA Section 302 (40 CFR Part 355) (Emergency Response Planning, Extremely Hazardous Substance):

No components are subject to the reporting.

EPCRA Section 304 (40 CFR Part 355) (Emergency Release Notification Requirements):

No components are subject to the reporting.

EPCRA Sections 311 & 312 (Hazardous Chemical Inventory Reporting, Hazard Categories):

Acute Health Hazard, Chronic health hazard, Fire Hazard

EPCRA Section 313 (40 CFR Part 372) (Toxic Chemical Release Inventory Reporting):

Contains a component that is subject to the reporting if present above De Minimus level.

4,4'-Isopropylidenediphenol, CAS #: 80-05-7

CERCLA Sections 102-103 (40 CFR Part 302) (Hazardous Substances Release Notification):

No components are subject to the reporting.

Clean Air Act:

- Ozone Depleting Substances (ODS): This product does not contain and is not manufactured with ozone depleting substances.
- Hazardous Air Pollutants, OSHA, Section 112(b), Table Z-1: No components are present.

NFPA rating: Health: 3 Fire: 1 Reactivity: 0 Special: -

HMIS rating: Health: 3 Flammability: 1 Physical hazard: 0

State Regulations:

Instruction: for regulatory information on components of this mixture, check the appropriate state websites.

International Regulations/Inventories:

Canadian Regulations:

DSL: All ingredients of this product are listed or are exempt from the DSL.

Released: December 3, 2015

WHMIS Classification (Controlled Products Regulations):

Class D2A: Material causing other toxic effects (Very toxic)
Class D2B: Material causing other toxic effects (Toxic)
Class E: Corrosive
Class B3: Combustible liquid with a flash point between 37.8°C
(100°F) and 93.3°C (200°F)

WHMIS Label Information:



SECTION 16 – OTHER INFORMATION

LEGEND

| | |
|------------|--|
| GHS | Globally Harmonized System |
| CAS | Chemical Abstracts Services |
| EC | European Community |
| EPA | Environmental Protection Agency |
| OSHA | Occupational Safety and Health Administration |
| ACGIH | American Conference of Governmental Industrial Hygienists |
| NIOSH | National Institute of Occupational Safety and Health |
| PEL | Permissible Exposure Limits |
| TLV | Threshold Limit Value |
| REL | Recommended Exposure Limit |
| TWA | Time-Weighted Average |
| STEL | Short-term exposure limit |
| IARC | International Agency for Research on Cancer |
| NTP | National Toxicology Program |
| STOT, SE | Specific Target Organ Toxicity following Single Exposure |
| STOT, RE | Specific Target Organ Toxicity following Repeated Exposure |
| DOT | Department of Transportation |
| IMDG | International maritime dangerous goods code |
| IATA, ICAO | International Air Transport Association, International Civil Aviation Organization |
| TSCA | Toxic Substances Control Act |
| EPCRA | Emergency Planning and Community Right-to-Know Act |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| RQ | Reportable Quantity |
| TQ | Threshold Quantity |
| TPQ | Threshold Planning Quantity |
| EHS | Extremely Hazardous Substances |
| DSL | Domestic Substance List |
| WHMIS | Workplace Hazardous Materials Information System |

Latest revision date: December 3, 2015 – Preparation of SDS in accordance to the GHS requirements

Date of the previous revision: Not available

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.