

PRODUCT NAME(S): Epoxy 600 Hardener (Part B)

SECTION 1 – IDENTIFICATION

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

Product name: Epoxy 600 Hardener (Part B)

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 05



GHS 08



GHS 07

Classification of the substance or mixture:

| Hazard Class | Category | Hazard Statement Codes | Hazard Statements |
|---|----------|------------------------|--|
| Acute toxicity, Oral | 4 | H302 | Harmful if swallowed |
| Acute Toxicity, Dermal | 4 | H312 | Harmful in contact with skin |
| Acute Toxicity, Inhalation | 5 | H333 | May be harmful 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 |
| Specific target organ toxicity, repeated exposure | 2 | H373 | May cause damage to central nervous system, kidney, liver, blood and skin through prolonged or repeated exposure |
| Aquatic Hazard, Acute | 3 | H402 | Harmful to aquatic life |
| Aquatic Hazard, Long term | 3 | H410 | Harmful to aquatic life with long lasting effects |

Precautionary Statements:

Prevention: 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.
 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.
 P273 Avoid release to the environment.

Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P310 Immediately call a POISON CENTER or doctor/ physician.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
 P363 Wash contaminated clothing before reuse.

Storage: P405 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: See Section 11.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Components | CAS # | EC # | Concentration, % |
|---|--------------|--------------|------------------|
| Isophorone Diamine | 2855-13-2 | 220-666-8 | 30 – 60 |
| Benzyl Alcohol | 100-51-6 | 202-859-9 | 30 – 60 |
| Reaction products with Bisphenol A diglycidyl ether homopolymer | Trade Secret | Trade Secret | 15 – 40 |

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

- Inhalation:** Immediate medical attention required. Remove the exposed person 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.
- 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 the exposed person to fresh air and keep at rest in a position comfortable for breathing. Remove dentures if any.
If 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: Water fog or fine spray, 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: Material may be ignited only if preheated to high temperatures (such in fire conditions). 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.

Hazardous Combustion products: carbon and nitrogen oxides, nitric acid, nitrosamine, ammonia gas, amines, aldehydes, hydrogen cyanide, flammable hydrocarbon fragments, organic acid vapors. Nitrogen oxide can react with water vapors to form corrosive nitric acid.

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 breathe 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. Remove residual with warm, soapy water. Scrubbing the surface with a broom or brush helps the decontamination solution to penetrate into porous surfaces. After cleaning, remove waste container and keep in a well ventilated area. 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 reseat if contamination is suspected. Use adequate ventilation to keep airborne levels below the exposure limits. Do not breathe 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. 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. Results for components are listed in Section 15.

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. Clean water should always be readily available for emergency skin and eye washing. Emergency eyewash fountains and safety shower are recommended in close proximity as a matter of good work practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Appearance: | Yellow Liquid |
| Odor: | Irritating, Ammonia-like |
| Odor threshold: | Not available |
| pH: | Not available |
| Melting point/ freezing point: | Not available |
| Initial boiling point and boiling range: | 195°C (383°F) |
| Flash point: | >112°C (>234°F) ASTM D3278; Setaflash 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: | 1.00 g/cm ³ |
| Solubility (water): | Negligible |
| Partition coefficient n-octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |

SECTION 10 – STABILITY AND REACTIVITY

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

Chemical stability: Stable under recommended 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 and reducing agents. Amines, bases, mineral and organic acids, reactive metals (sodium, calcium, zinc, etc.), copper, aluminum and zinc alloys.

CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

Hazardous decomposition products: Depend upon temperature, air supply and presence of other materials. Can include, but are not limited to carbon and nitrogen oxides, nitric acid, nitrosamine, ammonia gas, amines, aldehydes, hydrogen cyanide, flammable hydrocarbon fragments, organic acid vapors. Nitrogen oxide can react with water vapors to form corrosive nitric acid.

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: Harmful if inhaled. 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:

Not classified.

Aspiration hazard: Not an aspiration hazard.

Chronic toxicity:

Respiratory and Skin Sensitizer:

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

- Isophorone Diamine, CAS #: 2855-13-2: skin sensitizer
- Reaction product with bisphenol A diglycidyl ether homopolymer, CAS #: Trade Secret

Germ cell mutagenicity:

This product contains component which cause concern due to possible mutagenic effects, but for which the available information is not adequate for making a satisfactory assessment.

Carcinogenicity:

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

Reproductive toxicity:

Based on available data, risk to humans is not expected from exposure to this product.

Specific target organ toxicity, repeated exposure:

Central nervous system, kidney, liver, blood and skin.

Medical conditions aggravated by overexposure:

Central nervous system, kidney, liver, blood and skin disorders, if product is handled without adequate protection.

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

| Components | Test Results |
|--|---|
| Isophorone Diamine, CAS #: 2855-13-2 | <p>Acute Toxicity Oral LD50 (Rat): 1,030 mg/kg (OECD Test Guideline 401) Dermal LD50: (Rat): >2,000 mg/kg (OECD Guideline 402) Inhalation LC50 (Rat), 4hr: > 5.01 mg/L (OECD Guideline 403); Skin corrosion/irritation (Rabbit), 4hrs: 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>Chronic Toxicity Sensitization, skin and respiratory (Guinea pig): skin sensitizer (OECD Guideline 406, GPMT) Germ cell mutagenicity: Not mutagenic in bacteria, mammalian cell culture and test with mammals. Carcinogenicity: Negative in animal experiments. 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, OSHA and ACGIH. Reproductive toxicity: no data available STOT, RE: no data available</p> |
| Benzyl Alcohol, CAS #: 100-51-6 | <p>Acute toxicity: Oral (Rat): LD50: 1,230 mg/kg; Harmful if swallowed. May cause abdominal pain, nausea, vomiting and diarrhea. May cause nervous system effects with dizziness, incoordination, headache, numbness, confusion. Dermal (Rabbit): LD50: 2,000 mg/kg Inhalation (Rat) (vapor), 4hrs: LC50: >5,000 mg/m³; Harmful if inhaled. May cause respiratory tract irritation with symptoms of coughing, sore throat, runny nose. May cause nervous system effects including nausea, dizziness, lightheadedness, incoordination, headache, numbness, confusion. Skin corrosion/irritation (Rabbit), 24hrs: non-irritant (OECD Test Guideline 404) May be absorbed through the skin. If sufficient amounts are absorbed, systemic toxicity may occur with symptoms similar to those noted for inhalation. Prolonged or repeated contact may cause dermatitis with symptoms of red, itchy, dry skin; may cause an allergic reaction in sensitive individuals. Serious eye damage/eye irritation (Rabbit), 24hrs: causes serious eye irritation. (OECD Test Guideline 405). May cause moderate irritation with symptoms of reddening, tearing and stinging. Prolonged vapor contact may cause conjunctivitis. STOT, SE: Product not classified based on available data. Aspiration hazard: No data available.</p> <p>Chronic toxicity: Respiratory or skin sensitization (guinea pig): non-sensitizer. Germ cell mutagenicity: Not classified as mutagenic. in vitro: Ames: negative (Salmonella typhimurium, with/without metabolic activation). Chromosome aberration test: positive (Chinese hamster ovary cells without metabolic activation). Positive and negative results were seen in various in vitro studies; in vivo: Micronucleus assay: negative results were reported in various studies (mouse, male, intraperitoneal). Carcinogenicity: Not classified as carcinogenic. No carcinogenic effects were observed at the doses tested (rat, male/female, oral, 2 yrs, daily) (mouse, male/female, oral, 2 yrs, daily). Reproductive toxicity: Not classified as reproductive toxin. No effects on reproductive parameters observed at doses tested (Fertility Screening, oral, rat, female, NOAEL (parental): 5 mg/kg). Three generation study (oral, rat, male/female) NOAEL (parental): >750 mg/kg, NOAEL (F1): >750 mg/kg, NOAEL (F2): >750 mg/kg; Developmental Toxicity/Teratogenicity: No fetotoxicity and no teratogenic effects observed at the doses tested (rat, male/female, oral daily, NOAEL: 750 mg/kg). STOT, RE: Repeated ingestion may cause liver and kidney damage and blood disorders. Prolonged/repeated inhalation may cause lung damage. Liver - Irregularities - Based on Human Evidence, Central nervous system depression, stupor, narcosis</p> |
| Reaction product with bisphenol A diglycidyl ether homopolymer, CAS #: Trade Secret | <p>Acute toxicity: Skin corrosion/irritation (Rabbit), 24hrs: Corrosive. Causes severe skin burns. Serious eye damage/eye irritation (Rabbit), 24hrs: Corrosive. Causes serious eye damage. Aspiration hazard: No.</p> <p>Chronic Toxicity Sensitization, skin and respiratory: skin sensitizer. May cause an allergic skin reaction.</p> |

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life with long lasting effects. Do not allow product to reach ground water, water course or sewage system.

Released: March 1, 2016

Persistence and degradability: Not readily biodegradable. The total of the organic components contained in the product achieve values <60% BOD/COD, or <70% DOC reduction in tests for ease of degradability. Threshold values for 'readily degradable' are not reached (e.g. to OECD method 301).

Bioaccumulative potential: Not known.

Mobility in soil: Not known.

Other adverse effects: Not known.

Ecotoxicity test results: Not available for the mixture. Results for components:




| Components | Test Results |
|--|---|
| Isophorone Diamine, CAS #: 2855-13-2 | <p>Acute toxicity Fish (golden orfe), 96hrs: LC50: 110 mg/L (Directive 84/449/EEC, C.1) Aquatic invertebrates (Daphnia magna), 48hrs: EC50: 23 mg/L (OECD Guideline 202, part 1, static) Aquatic plants (green algae), 72hrs: EC50 >50 mg/L (growth rate) (Directive 88/302/EEC, part C, p. 89 /EC50) Microorganisms (bacterium), 18hrs: EC10: 1,120 mg/L (DIN 38412 Part 8)</p> <p>Ecological Data Biodegradation: Poorly biodegradable. Moderately/partially eliminated from water. DOC reduction, 28days: 8% (Directive 92/69/EEC, C.4-A (aerobic)) DOC reduction 42% (OECD 303A; ISO 11733; 92/69 EEC,V, C.10 (aerobic), activated sludge) Bioaccumulation: Not expected, based on n-octanol/water distribution coefficient (log Pow) Adsorbable organically-bound halogen (AOX): This product does not contain organically-bound halogen. Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.</p> |
| Benzyl Alcohol, CAS #: 100-51-6 | <p>Acute toxicity: (Category 2), H401 - Toxic to aquatic life. An environmental hazard. Fish (Bluegill), 96hrs: LC50: 10 mg/L; (Fathead minnow), 96hrs: LC50: 460 mg/L Aquatic invertebrates (Daphnia magna), 24hrs: EC50: 55 mg/L; 48hrs: 230 mg/L (OECD Test Guideline 202) Aquatic plants (algae), 96hrs: EC50: 640 mg/L Microorganisms (Bacteria), 30-min: EC50: 71.4 mg/L</p> <p>Ecological Data: Persistence and degradability: Readily biodegradable; 92-96% in 28 days (OECD Test Guideline 301C) Bioaccumulative potential: Bioaccumulation is not expected (BCF = 0.31); Octanol/water partition coefficient (Log Pow): 1.05 Mobility in soil: High mobility; will readily leach through soil. PBT/vPvB assessment: not available as chemical safety assessment not required/not conducted.</p> |
| Reaction product with bisphenol A diglycidyl ether homopolymer, CAS #: Trade Secret | <p>Chronic Toxicity: Category 2 – Toxic to aquatic life with long lasting effects.</p> |

SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: 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 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., (Isophoronediamine, Modified Aliphatic Amine) | Amines, liquid, corrosive, n.o.s., (Isophoronediamine, Modified Aliphatic Amine) | Amines, liquid, corrosive, n.o.s., (Isophoronediamine, Modified Aliphatic Amine) |
| Transport hazard class(es): | 8 | 8 | 8 |
| Packing group: | III | III | III |
| Hazard Label |  |  |  |
| Environmental Hazard: | Yes, Marine pollutant Product contains environmentally hazardous substances: Isophoronediamine, Modified Aliphatic Amine | Yes, Marine pollutant Product contains environmentally hazardous substances: Isophoronediamine, Modified Aliphatic Amine | |
| Special precautions: | Shipping descriptions are provided for informational purposes and do not consider container sizes and packaging. Certain exceptions may be applied as outlined in 49 CFR 173.150. Special Provisions: IB3, T7, TP1, TP28 Exceptions: 154; Non bulk: 203 / Bulk: 241 / Passenger aircraft rail: 5L / Cargo aircraft only: 60L / Location: A | | |

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

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

No components of this product are present above De Minimis level and therefore do not require reporting.

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 listed.

Exposure limits:

◦ Benzyl alcohol, CAS #: 100-51-6: TWA WEEL: 10 ppm / 44.20 mg/m³

Clean Water Act:

- Section 307(a) (Toxic pollutants): No components are listed.
- Section 311(b)(2): Table 116.4A (Hazardous chemicals) / Table 117.3 (RQ): No components are listed.

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

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

State Regulations:

California Prop. 65 Components:

This product does not contain components known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

International Regulations/Inventories:

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

WHMIS Classification (Controlled Products Regulations):

Class D2B: Material causing other toxic effects (Toxic)

WHMIS Label Information:

Class E: Corrosive



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: March 1, 2016 – Preparation of SDS in accordance to the GHS requirements

Date of the previous revision: April 9, 2013

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.