

PRODUCT NAME(S): Rhino® Concrete Repair Resin

SECTION 1 – IDENTIFICATION

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

Product name: Rhino® Concrete Repair Resin

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 02



GHS 08



GHS 07



GHS 09

Classification of the substance or mixture:

Hazard Class	Category	Hazard Statement Codes	Hazard Statements
Acute Toxicity, Oral	5	H303	May be harmful if swallowed
Acute Toxicity, Dermal	5	H313	May be harmful in contact with skin
Acute Toxicity, Inhalation	5	H333	May be harmful if inhaled
Skin corrosion / Irritation	2	H315	Causes skin irritation
Serious eye damage / Eye irritation	2A	H319	Causes serious eye irritation
Aspiration hazard	1	H304	May be fatal if swallowed and enters airways
Skin Sensitization	1B	H317	May cause an allergic skin reaction
Germ Cell Mutagenicity	1B	H340	May cause genetic defects
Carcinogenicity	1B	H350	May cause cancer by inhalation and skin absorption
Reproductive Toxicity	2	H361	Suspected of damaging fertility or the unborn child
Specific target organ toxicity, single exposure	3	H336	May cause drowsiness or dizziness
Specific target organ toxicity, repeated exposure	2	H373	May cause damage to liver, kidney, blood, skin, nervous and respiratory system through prolonged or repeated exposure by inhalation and skin absorption May cause damage to the eyes through prolonged or repeated exposure (vapors)
Aquatic Hazard, Acute	2	H401	Toxic to aquatic life
Aquatic Hazard, Chronic	2	H411	Toxic to aquatic life with long lasting effects
Flammable Liquids	3	H226	Flammable liquid and vapor

Precautionary Statements:

Prevention:	P201 P202 P281 P260 P271 P264 P272 P273 P210 P233 P240 P241 P242 P243	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe mist, vapors, spray. Use only outdoors or in a well-ventilated area. Wash exposed area with plenty of water and soap thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release in environment. Keep away from flames and hot surfaces. No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
Response:	P301 + P310 + P331	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Released: August 4, 2016

	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.
	P337 + P313	If eye irritation persists: Get medical advice/attention.
	P304 + P341 + P312	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
	P308 + P313	IF exposed or concerned: Get medical advice/attention.
	P314	Get medical advice/attention if you feel unwell.
	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: Not known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	EC #	Concentration, %
Solvent naphtha (petroleum), light aromatic	64742-95-6	265-199-0	25 – 50
Naphthalene	91-20-3	202-049-5	0 – 5

SECTION 4 – FIRST-AID MEASURES

Description of First Aid measures:

Inhalation:	Remove the exposed person to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or physician if experiencing respiratory symptoms. 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:	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. If skin irritation develops, get medical advice/attention.
Eye:	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. If eye irritation persists, get medical advice/attention.
Ingestion:	Immediate medical attention required. Call a poison center or physician. Remove exposed person 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 more 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. Recommended medical monitoring for at least 24 hours.

SECTION 5 – FIRE-FIGHTING MEASURES

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

Unsuitable extinguishing media: Direct water stream may cause frothing, splattering of burning material and spreading of fire.

Released: August 4, 2016

Specific hazards arising from the chemical: Flammable Liquid, Category 3 per GHS. 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 oils 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 it can be done without risk, 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.

- Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: Flammable Liquid, Category 3 per GHS. Combustible Liquid, Class II per OSHA 29 CFR 1910.106.

Hazardous Combustion products: carbon and 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. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. No action should be taken involving any personal risk or without suitable training.

This material is toxic to aquatic life with long lasting effects. Water contaminated with this material must be contained and prevented being discharged to any waterway, sewer or drain. Fire water run-off, if not contained, will 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. Avoid breathing 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. May be harmful to the environment if released in large quantities. See Section 12.

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. Wash the spill site with soap and water. Cover container and remove from work to 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. Approach release from upwind. 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. Handle empty containers with care; vapor/residue may be ignited. Do not reseal 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. Segregate from acids and acid forming substances.

Storage stability: Stable under normal conditions.

Storage temperature: 60 - 90°F (16 – 32°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 and PVC) should be worn always when working with this product. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose contaminated gloves after use in accordance with good laboratory practices. 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.

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

Appearance:	Black Liquid
Odor:	Solvent-like
Odor threshold:	Not available
pH:	Not available
Melting point/ freezing point:	Not available for mixture; Solvent Naphtha -95(-44)°C; Naphthalene: 79 - 81°C (175 - 178°F)
Initial boiling point and boiling range:	For mixture: >176°C (>350°F); Solvent Naphtha: 161-173°C; Naphthalene: 218°C
Flash point:	Not available for mixture; Solvent Naphtha: 40°C (104°F) (CC); Naphthalene 80°C (176°F) (CC)
Evaporation rate:	Slow
Flammability (solid, gas):	Not available
Upper/ lower flammability or explosive limits:	Not available for mixture; Solvent Naphtha: 7.0%(V)/1.0%(V); Naphthalene: 5.9%(V)/ 0.9%(V)
Vapor pressure:	Not available for mixture; Solvent Naphtha 2.8-4.05 hPa at 25°C; Naphthalene: 0.04 hPa (0.03 mmHg) at 25°C and 1.3 hPa (1 mmHg) at 53°C
Vapor density:	Not available for mixture; Solvent Naphtha: 4.3; Naphthalene: 4.4 (vs air)
Relative density:	for mixture: 0.95; Solvent Naphtha: 0.86-0.88 g/cm ³ at 25°C; Naphthalene: 0.99
Solubility (water):	Not available for mixture; Solvent Naphtha: 40-75 mg/L at 25°C; Naphthalene: 30 mg/L @ 25°C
Partition coefficient n-octanol/water:	Not available for mixture; Solvent Naphtha: log Kow: 3.42-3.90 at 25°C; Naphthalene: log Pow: 3.30
Auto-ignition temperature:	For mixture: >449°C (>840°F); Solvent Naphtha: 400°C; Naphthalene: 526°C (979°F)
Decomposition temperature:	Not available
Viscosity:	For mixture: 5 - 15 cps

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. Avoid unintended contact with isocyanates; the reaction will generate heat.

Released: August 4, 2016

Note: Product contains Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: Flammable Liquid, Category 3 per GHS. Keep away from open flame and sparks.

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

Incompatible materials: Strong oxidizing agents. Water, alcohols, amines, 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 and nitrogen oxides, amines, hydrogen cyanide, lower molecular weight organic molecules.

SECTION 11 – TOXICOLOGICAL INFORMATION

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

Symptoms of exposure:

Acute toxicity:

Oral: May be harmful if swallowed. Adverse symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

Dermal: May be harmful in contact with skin. Adverse symptoms may include irritation, redness, swelling, dryness and cracking.

Inhalation: May be harmful if inhaled. Inhalation of vapors may cause irritation of the mucous membranes of the nose, throat or trachea, breathlessness, chest discomfort, difficult breathing and reduced pulmonary function. Exposure to levels exceeding the TLV or PEL may result in central nervous system depression (headache, fatigue, tremor, drowsiness, dizziness, nausea, vomiting, loss of coordination, weakness, sweating, and confusion).

Skin corrosion / irritation:

Irritating to the skin. Skin contact may result in dermatitis, either irritative or allergic with symptoms of reddening, itching, and swelling.

Serious eye damage / eye irritation:

May cause serious eye irritation. Adverse symptoms may include tearing, redness and itching. Prolonged contact may cause conjunctivitis.

Specific target organ toxicity, single exposure:

May cause drowsiness or dizziness.

- Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: May cause drowsiness or dizziness.
- Naphthalene, CAS #: 91-20-3: May cause respiratory irritation. May cause drowsiness or dizziness.

Aspiration hazard: Yes.

Chronic toxicity:

Respiratory and Skin Sensitizer:

This product contains a component that is reported to be a respiratory or skin sensitizer.

- Naphthalene, CAS #: 91-20-3: skin sensitizer.

Germ cell mutagenicity:

This product contains a component that may cause genetic defects.

- Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6

Carcinogenicity:

This product contains components classified as carcinogen.

- Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: Category 1B per GHS.
 - Petroleum solvents: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans).
- Naphthalene, CAS #: 91-20-3: IARC: Group 2B (Possible human carcinogen)

Reproductive toxicity:

This product contains components which are suspected of damaging fertility or the unborn child.

- Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: Possible reproductive hazard.
- Naphthalene, CAS #: 91-20-3: limited evidence that may damage the developing fetus.

Specific target organ toxicity, repeated exposure:

Liver, kidney, blood, eyes, skin, respiratory and nervous system.

Medical conditions aggravated by overexposure:

Liver, kidney, blood, eyes, skin, respiratory and nervous system disorders if product is handled without adequate protection.

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

Components	Test Results
Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6	<p><u>Acute Toxicity:</u> Oral (Rat): LD50: >5,000 mg/kg; Minimally toxic. May cause gastro-intestinal pain, coughing, headache, dizziness, diarrhea, nausea, vomiting and unconsciousness. Dermal (Rabbit): LD50: >3,000 mg/kg; Minimally toxic. May cause dryness leading to itching and dermatitis. Inhalation (Rat), 4hrs: LC50: 6,000-10,000 mg/m³; Minimally toxic. Exposure to levels exceeding the TLV or PEL may result in central nervous system depression. Symptoms include drowsiness, dizziness and loss of coordination. Skin corrosion/irritation (Rabbit): moderately irritating to skin. Adverse symptoms: redness, dryness or roughness. Serious eye damage/eye irritation (Rabbit): Irritating to eyes. Not expected to cause serious eye damage. STOT, SE: May cause drowsiness or dizziness. Target organs: Central nervous system Aspiration Hazard: Aspiration into the lungs if swallowed or when vomiting may cause chemical pneumonitis which can be fatal.</p> <p><u>Chronic Toxicity</u> Respiratory and Skin Sensitization: Not expected to be a skin sensitizer. Did not cause sensitization in laboratory animals. Germ cell mutagenicity: may cause genetic defects. Carcinogenicity: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans). May cause cancer per ECHA.</p>

<p>Naphthalene, CAS #: 91-20-3</p>	<p>Reproductive Toxicity: suspected of damaging fertility or the unborn child. STOT, RE: Not expected to cause organ damage from prolonged or repeated exposure. *Based on the Systematic Toxicity and physical-chemical properties of this material when compared with test data from similar compounds.</p> <p>Inhalation and skin absorption</p> <p><u>Acute Toxicity:</u> Oral (Rat): LD50: 490 mg/kg; Abdominal pain. Diarrhea. Convulsions. Unconsciousness. Dermal (Rabbit): LD50: >20,000 mg/kg Inhalation (Rat), 1hr: LC50: >340 mg/m³; Can irritate nose and throat causing coughing and wheezing, eyes and cause general depressed activity. High exposure may cause headache, fatigue, tremor, dizziness, nausea, vomiting, weakness, sweating, confusion. Skin corrosion/irritation (Rabbit): May be absorbed through skin. High or repeated exposure can irritate skin. Serious eye damage/eye irritation (Rabbit): High or repeated exposure can irritate and burn the eyes. STOT, SE: May cause respiratory irritation. May cause drowsiness or dizziness. Aspiration Hazard: No.</p> <p><u>Chronic Toxicity</u> Respiratory and Skin Sensitization: may cause skin allergy. Germ cell mutagenicity: EPA GENETOX PROGRAM 1988, Cell transformation /mouse and rat embryo, Histidine reversion-Ames test: Negative Carcinogenicity: GHS: Carcinogenicity (Category 2); IARC: Group 2B (possible human carcinogen); NTP - Reasonably anticipated to be a human carcinogen; ACGIH: A4 (Not Classifiable as a Human Carcinogen); OSHA: No component of this product is identified as a carcinogen. OSHA - No component of this product is identified as a carcinogen. Limited evidence of carcinogenicity in animal studies; NCI Carcinogenesis Studies (inhalation); clear evidence: rat; unclear evidence: mouse; NTP Carcinogenesis Studies (inhalation); some evidence: mouse; There is evidence that it causes cancer of larynx and intestines in humans and nasal and lung in animals. Reproductive Toxicity: limited evidence that may damage the developing fetus. Tumorigenic effects - uterine tumors. Teratogenicity: Naphthalene and its metabolites have been reported to cross the human placenta in amounts sufficient to cause fetal toxicity. Oral, rat: TDLo = 4500 mg/kg (female 6-15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus) and Specific Developmental Abnormalities - other developmental abnormalities.; Intraperitoneal, rat: TDLo = 5925 mg/kg (female 1-15 day(s) after conception) Specific Developmental Abnormalities - musculoskeletal system and cardiovascular (circulatory) system. STOT, RE: Liver (Jaundice), kidney, blood (anemia) , central nervous and respiratory system, eyes (cataract), skin. Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in: cataracts, optic neuritis, corneal injury, eye irritation. Ingestion may provoke the following symptoms: hemolytic anemia, hemoglobinuria, nausea, headache, vomiting, gastrointestinal disturbance, convulsions, anemia, kidney injury, seizures, coma.</p>
--	---

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic life with long lasting effects. Do not release into natural waters. Presents danger to drinking water if even small quantities leak into the ground.

Persistence and degradability: Not readily biodegradable by OECD criteria. In contact with water the substance will hydrolyze slowly. After evaporation or exposure to the air, the product will be rapidly degraded by photochemical processes.

Bioaccumulative potential: Has potential to bioaccumulate.

Mobility in soil: Not known for the mixture. See Table below for components.

Other adverse effects: Not known.

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

Components	Test Results
<p>Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6</p>	<p><u>Acute Toxicity:</u> Harmful to aquatic life in very low concentrations. Fish (Rainbow trout), 96hrs: LC50=9.2 mg/L; Aquatic invertebrates (Daphnia magna), 48hrs: EC50=3.2 mg/L Aquatic plants (algae), 72hrs: EC50= 2.6 mg/L <u>Chronic toxicity:</u> Very toxic to aquatic life with long lasting effects. Fish (Rainbow trout), 28days: NOELR: 1.23 mg/L; Aquatic invertebrates (Daphnia magna), 21day: NOELR: =2.14 mg/L <u>Ecological Data</u> Biodegradability: Not readily biodegradable. Half-lives can be expected to range from a couple of days to a few months. Oxygen depletion: 30.9% in 2days Bioaccumulative potential: log Kow: >3, has potential to bioaccumulate. Bioconcentration factor (BCF): No data available. Mobility in soil: No data available. Results of PBT and vPvB assessment: not a PBT or a vPvB.</p>
<p>Naphthalene, CAS #: 91-20-3</p>	<p><u>Acute Toxicity:</u> Harmful to aquatic life in very low concentrations. Fish (Rainbow trout), 96hrs: LC50=0.9-9.8 mg/L; (fathead minnow): 1 - 6.5 mg/L Aquatic invertebrates (Daphnia magna), 48hrs: EC50=1.0-3.4 mg/L Aquatic plants: (green algae), 24hrs: EC50= 33 mg/L <u>Chronic toxicity:</u> Very toxic to aquatic life with long lasting effects. Fish, 3 days: NOEC: 1.8 mg/L; LOEC: 3.2 mg/L <u>Ecological Data</u> Biodegradability: Not readily biodegradable. Half-lives can be expected to range from a couple of days to a few months. Bioaccumulative potential: Bioconcentration factor (BCF): 427 - 1,158. Bioconcentration occurs to a moderate extent but since depuration and metabolism readily proceed in aquatic organisms, this is a short term problem. In the atmosphere, naphthalene rapidly photodegrades (half-life 3-8 hr). Naphthalene shows low biological oxygen demand and is expected to cause little O₂ depletion in aquatic systems. Mobility in soil: When adsorbed to sediment, biodegradation occurs much more rapidly than in the overlying water column. When spilled on land, naphthalene is adsorbed moderately to soil and undergoes biodegradation. However, in some cases it will appear in the groundwater where biodegradation still may occur if conditions are aerobic. Results of PBT and vPvB assessment: Log P (oct) = 3.01 - 3.59</p>

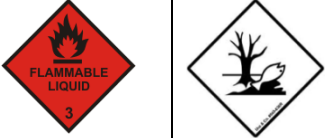
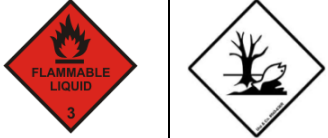
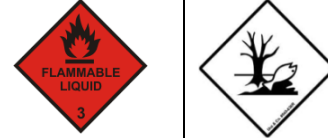
SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: The generation of waste should be avoided or minimized wherever possible. If product becomes a waste, it meets criteria of hazardous waste as defined in 40 CFR 261, Subpart C and D. Do not discharge into sewer system. Spill cleanup residues are subject to RCRA storage and disposal requirements.

Dispose waste in compliance with local, state and federal regulations via licensed waste disposal contractor. Preferred disposal method is burning in a chemical incinerator equipped with an afterburner and scrubber; extra care should be taken in igniting as this material is flammable.

Container disposal: Even after emptying, container may retain residues. Do not heat or cut empty container with electric or gas torch since highly toxic vapors and gases can be formed. 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 1993	UN 1993	UN 1993
UN proper shipping name:	Flammable liquids, n.o.s. (contains Solvent naphtha)	Flammable liquids, n.o.s. (contains Solvent naphtha)	Flammable liquids, n.o.s. (contains Solvent naphtha)
Transport hazard class(es):	3	3	3
Packing group:	III	III	III
Hazard Label			
Environmental Hazard:	Yes. Marine pollutant. Product contains environmentally hazardous substances.		
Special precautions:	Special Provisions: B1, B52, IB3, T4, TP1, TP29 Exceptions: 150 Non bulk: 203 / Bulk: 242 Passenger aircraft rail: 60L / Cargo aircraft only: 220L		

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):

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

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

The following components are subject to the reporting:

- o Naphthalene, CAS #: 91-20-3: in Product: 0-5% De Minimis: 0.1%

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

The following components are subject to the reporting if a criterion of reportable quantity is fulfilled:

- o Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6: RQ: Not assigned
- o Naphthalene, CAS #: 91-20-3: RQ: 100 lbs; Product RQ: 3,000 lbs. (380 gallons)

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: The following components are listed:

Substance	Regulatory Limits			Recommended Limits	
	OSHA PEL ppm ^(d)	mg/m ³	Cal/OSHA PEL 8-hour TWA, mg/m ³	NIOSH REL Up to 10-hour TWA, mg/m ³	ACGIH® 2015 TLV® 8-hour TWA, mg/m ³
Solvent naphtha (petroleum), light aromatic, CAS #: 64742-95-6	500	2,000	1,600 ppm	350 (C) 1,800 (15min)	See TLV Book Appendix H
Naphthalene, CAS #: 91-20-3	10	50	10ppm (ST) 15ppm	10ppm (ST) 15ppm	10ppm (ST) 15ppm

ppm-parts per million; C-Ceiling Limit; ST-Short term exposure limit

Clean Water Act:

- Section 307(a)(1) (Toxic pollutants):
 - o Naphthalene, CAS #: 91-20-3
- Section 311(b)(2): Table 116.4A (Hazardous chemicals) / Table 117.3 (RQ):
 - o Naphthalene, CAS #: 91-20-3: RQ: 100 lbs

EPA Hazardous Waste Code: D001 (Ignitable waste)

RCRA Code: Naphthalene, CAS #: 91-20-3: U165

NFPA rating: Health: 2 Fire: 2 Reactivity: 1 Special: 0

HMIS rating: Health: 2* Flammability: 2 Physical hazard: 1

State Regulations:

California Prop. 65 Components:

This product contains chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

- o Naphthalene, CAS #: 91-20-3:
 - causes cancer; Date listed: April 19, 2002

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

International Regulations/Inventories:

Canada: 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

WHMIS Label Information: Class B3: Combustible Liquid



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
COD / BOD	Chemical Oxygen Demand / Biological Oxygen Demand
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
EHS	Extremely Hazardous Substances
DSL	Domestic Substance List
WHMIS	Workplace Hazardous Materials Information System

Latest revision date: August 4, 2016

Date of the previous revision: January 7, 2016 – Preparation of SDS in accordance to the GHS requirements

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.