

PRODUCT NAME(S): Liquid Release Agent

SECTION 1 – IDENTIFICATION

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

Product name: Liquid Release Agent

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 08



GHS 07



GHS 09

Classification of the substance or mixture:

<u>Hazard Class</u>	<u>Category</u>	<u>Hazard Statement Codes</u>	<u>Hazard Statements</u>
Skin corrosion / irritation	2	H315	Causes skin irritation
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
Aspiration hazard	1	H304	May be fatal if swallowed and enters airways
Aquatic Hazard, Chronic	2	H411	Toxic to aquatic life with long lasting effects
Flammable Liquids	4	H227	Combustible liquid

Precautionary Statements:

Prevention: P201 Obtain special instruction before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P281 Use personal protective equipment as required.
 P261 Avoid breathing fume, mist, vapors.
 P271 Use only outdoors or in a well-ventilated area.
 P264 Wash exposed area with plenty of water and soap thoroughly after handling.
 P273 Avoid release to the environment.
 P210 Keep away from flames and hot surfaces. No smoking.

Response: P301 + P310 + P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P332 + P313 If skin irritation occurs: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P304 + P340 + P312 IF INHALED: 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.
 P391 Collect Spillage
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage: P403 + P233 + P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 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: Not known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	EC #	Concentration, %
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	90 – 100

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. Get medical attention if symptoms occur.
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. Get medical advice/attention if irritation develops.
- 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 develops and persists, consult a physician or ophthalmologist.
- Ingestion:** Immediately get medical advice/attention. Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed: Aspiration may cause pulmonary edema and pneumonitis. 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: Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Symptoms may be delayed. 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 or carbon dioxide fire extinguishers.

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

Specific hazards arising from the chemical: Flammable Liquid, Category 4 per GHS. Keep away from extreme heat or open flame. 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. Vapors may be heavier than air and travel considerable distance to a source of ignition and flash back. Mists or sprays may be flammable below regular flash points.

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. If released, product may float and ignite on surface of water.

- Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9; Flash Point: 66°C (151°F); Combustible Liquid, Category 4 per GHS; Combustible Liquid, Class IIIA per OSHA 29 CFR 1910.106

Hazardous combustion products: carbon oxides, volatile 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. Prevent static discharge. 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. 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.

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, 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. Avoid breathing vapors or mist during clean up. Eliminate all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Use protective equipment as described in Section 8.

Released: March 18, 2016

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 for more details.

Methods and materials for containment and cleaning up: A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor; but may not prevent ignition in closed spaces. 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. 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. Approach release from upwind. Remove ignition sources. Move containers from spill area. 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: Product is combustible. Check atmosphere for explosiveness and oxygen deficiencies. Carefully vent any internal pressure before removing closure. Handle empty containers with care; vapor/residue may be ignited and explode. Avoid exposure to heat. 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. Store locked up. Keep container tightly closed and sealed until ready for use. Protect it against physical damage and moisture. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Flammable mixtures may exist within the vapor space of containers at room temperature. 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.

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: Results are listed in Section 15.

Appropriate engineering controls: Use only with adequate ventilation. Provide process enclosures, local exhaust ventilation or other engineering controls to maintain recommended PEL.

Personal protective equipment:

Eye/face protection:

When directly handling liquid product, eye protection is required. Examples of eye protection include safety glasses and goggles. Contact lenses should not be worn when working with chemicals.

Skin/body protection:

Product easily penetrates the skin and may carry other dissolved chemicals into the body; therefore glove selection is very important. Butyl rubber, fluoroelastomer, neoprene, or thick (15 mil) latex gloves are recommended.

Body should be covered with appropriate clothing (apron, arm covers or full body suit) depending on the task being performed and the risks involved. 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 that is recommended for use in solvent-containing areas. 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:	Clear Liquid
Odor:	Hydrocarbon-like
Odor threshold:	Not available
pH:	Not available
Melting point/ freezing point:	-25°C (-13°F)
Initial boiling point and boiling range:	189°C (372°F)
Flash point:	66°C (151°F)
Evaporation rate:	Not available
Flammability (solid, gas):	May generate electrostatic charges.
Upper/ lower flammability or explosive limits:	7% (V) / 0.6% (V)
Vapor pressure:	1 hPa (1 mm Hg) at 20°C (68°F)
Vapor density:	Not available
Relative density:	0.74 - 0.85
Solubility (water):	Insoluble in water.
Partition coefficient n-octanol/water:	log Pow: > 3
Auto-ignition temperature:	240°C (464°F)
Decomposition temperature:	Not available
Viscosity:	kinematic : 1.55 cSt; dynamic : 0.00059 - 0.00068 Pa.s (40 °C)
VOC content	100 %

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Vapors may form explosive mixture with air. Hazardous polymerization does not occur. Non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Excessive heat (temperatures exciding the flash point), open flame and sparks, mist formation.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Depend upon temperature, air supply and presence of other materials. Can include, but are not limited to carbon oxides, volatile 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, cough, sore throat, vomiting, nausea and diarrhea.

Dermal: No data available.

Inhalation: May be harmful if inhaled, especially if handled at elevated temperatures; it may give off-gas, vapor or mist that is very irritating to the respiratory system. Adverse symptoms may include dizziness, drowsiness, nausea, headache and difficulties with breathing.

Skin corrosion / irritation:

Irritating to skin. Contact may result in dryness and cracking of the skin.

Serious eye damage / eye irritation:

Direct contact with eyes may cause temporary irritation.

Specific target organ toxicity, single exposure:

This product contain component that may target organs after single exposure:

- Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9: May cause drowsiness or dizziness.

Aspiration hazard:

May be fatal if swallowed and enters airways.

Chronic toxicity:

Respiratory and Skin Sensitizer:

This product does not contain components known or reported to be a skin or respiratory sensitizer.

Germ cell mutagenicity:

This product contains component that is reported to be mutagen:

- Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9

Carcinogenicity:

This product contains component that is reported to be carcinogen:

- Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9

Reproductive toxicity:

This product contains components that are suspected of damaging fertility or the unborn child:
 ○ Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9

Specific target organ toxicity, repeated exposure:

Not classified.

Medical conditions aggravated by overexposure:

Respiratory and central nervous system if product is handled without adequate protection.

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

Components	Test Results
Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9	<p><u>Acute Toxicity:</u> Oral LD50 (Rat): No data available. Causes cough, sore throat, vomiting, diarrhea and symptoms stated in inhalation. Dermal LD50 (Rat): No data available. Inhalation LC50: No data available. Symptoms: Dizziness, drowsiness, nausea, headache and unconsciousness. Skin corrosion/irritation (Rabbit): Prolonged skin contact may cause temporary irritation. Dry skin. Serious eye damage/eye irritation (Rabbit): Direct contact with eyes may cause temporary irritation. STOT, SE: May cause drowsiness and dizziness. Aspiration hazard: May be fatal if swallowed and enters airways. Aspiration may cause pulmonary edema and pneumonitis.</p> <p><u>Chronic toxicity:</u> Sensitization, skin and respiratory: Not a respiratory sensitizer. Not expected to cause skin sensitization. Germ cell mutagenicity: May cause genetic defects. Carcinogenicity: May cause cancer. Reproductive toxicity: suspected of damaging fertility or the unborn child. STOT, RE: not classified.</p>

SECTION 12 – ECOLOGICAL INFORMATION

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

Persistence and degradability: Not known.

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, where available:




Components	Test Results
Naphtha (petroleum), hydrotreated heavy, CAS #: 64742-48-9	Aquatic toxicity (Chronic): Category 2. Toxic to aquatic life with long lasting effects.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: The generation of waste should be avoided or minimized wherever possible. If product becomes a waste, it may meet criteria of hazardous waste as defined in 40 CFR 261, Subpart C and D. Do not discharge into sewer system. Spill cleanup residues may still be subject to RCRA storage and disposal requirements. Dispose waste in compliance with local, state and federal regulations via licensed waste disposal contractor. Preferred method of disposal 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:	UN1268	UN1268	UN1268
UN proper shipping name:	Petroleum destilates, n.o.s. (petroleum naphtha)	Petroleum destilates, n.o.s. (petroleum naphtha)	Petroleum destilates, n.o.s. (petroleum naphtha)
Transport hazard class(es):	3	3	3
Packing group:	III	III	III
Hazard Label			
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: 144, B1, IB3, T4, TP1, TP29 Exceptions: 150; Non bulk: 203 / Bulk: 242 Passenger aircraft rail: 60L / Cargo aircraft only: 220L / 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):

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

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

No components are subject to the 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, Z-2, Z-3:

Substance	Regulatory Limits			Recommended Limits	
	OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH® 2015 TLV®
	ppm	mg/m ³	(as of 4/26/13) 8-hour TWA, mg/m ³	(as of 4/26/13) Up to 10-hour TWA, mg/m ³	8-hour TWA, mg/m ³
Petroleum distillates (Naphtha), CAS: NA	500	2,000	1,600 ppm	350 mg/m ³ (C) 1,800 mg/m ³ (15 min)	See TLV® book Appendix H

ppm-parts per million; (C) – Ceiling;

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: 2 Fire: 2 Reactivity: 0 Special: 0

HMIS rating: Health: 2* Flammability: 2 Physical hazard: 0

State Regulations:

California Prop. 65 Components:

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

California Safer Consumer Products Regulations, Candidate Chemicals List:

- Naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)

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

International Regulations/Inventories:

Canadian Regulations: All components 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 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
PACs / PAH	Polycyclic Aromatic Compounds / Polycyclic Aromatic Hydrocarbon Content
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 18, 2016 – Preparation of SDS in accordance to the GHS requirements

Date of the previous revision: September 21, 2011

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.