

PRODUCT NAME(S): Stone Seal VOC
SECTION 1 – IDENTIFICATION

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

Product name: Stone Sealer VOC

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



GHS 02

Classification of the substance or mixture:

Hazard Class	Category	Hazard Statement Codes	Hazard Statements
Acute Toxicity, Dermal	5	H313	May be harmful in contact with skin
Skin corrosion / Irritation	2	H315	Causes skin irritation
Serious eye damage / Eye irritation	2A	H319	Causes serious eye irritation
Skin Sensitization	1	H317	May cause an allergic skin reaction
Specific target organ toxicity, single exposure	3	H335 H336	May cause respiratory irritation May cause drowsiness and dizziness
Specific target organ toxicity, repeated exposure	2	H373	May cause damage liver, kidney and skin through prolonged or repeated exposure
Aquatic Hazard, Acute	2	H401	Toxic to aquatic life
Aquatic Hazard, Chronic	2	H411	Toxic to aquatic life with long lasting effects
Flammable Liquids	2	H226	Flammable liquid and vapor

Precautionary Statements:

Prevention:	P260	Do not breathe mist/ vapors/ spray.
	P280	Wear protective gloves/ protective clothing / eye protection/ face protection.
	P271	Use only outdoors or in a well-ventilated area.
	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.
	P210	Keep away from flames and hot surfaces. No smoking.
	P240	Ground container and receiving equipment.
	P241	Use explosion proof electrical, ventilating, lighting equipment.
	P242	Use only non-sparking tools.
Response:	P243	Take precautionary measures against static discharge.
	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.
Storage:	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 doctor/physician if you feel unwell.
	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.

Released: March 3, 2016
Disposal: P501

Dispose of contents/container to hazardous or special waste collection point in accordance with local/regional/national/international regulations.

Hazards not otherwise classified:

No specific dangers known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	EC #	Concentration, %
Parachlorobenzotrifluoride (PCBTF)	98-56-6	202-681-1	60 - 100
Acetone	67-64-1	200-662-2	1 – 5
Ethyl 3-ethoxypropionate	763-69-9	212-112-9	1 – 5

SECTION 4 – FIRST-AID MEASURES
Description of First Aid measures:
Inhalation: Move to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory problems, seek medical attention.

Skin: Immediately wash material off of the skin with plenty of soap and water. Remove contaminated clothing and shoes and wash them before reuse. Get medical advice/attention if irritation develops or persists.

Eye: Immediately rinse 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 corneal injury. Get medical advice/attention if eye irritation develop or persists.

Ingestion: 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 thoroughly with water and then give 60 to 240 mL (2 to 8 oz) of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. If unconscious, place in recovery position and 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. Get medical attention if you feel unwell.

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

General advice for First Aid responders: 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 48 hours.

SECTION 5 – FIRE-FIGHTING MEASURES
Suitable extinguishing media: Those recommended for Class B fuels: Alcohol-resistant foam, dry chemical, carbon dioxide fire extinguishers.

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

Specific hazards arising from the chemical: Flammable Liquid, Category 2 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.

Component, CAS #	Flash Point, °C (°F)	GHS	OSHA 29 CFR 1910.106
Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6	43°C (109°F)	Flammable Liquid, Category 3	Combustible Liquid, Class II
Acetone, CAS #: 67-64-1	-20°C (-4°F)	Flammable Liquid, Category 2	Flammable Liquid, Class IB
Ethyl 3-ethoxypropionate, CAS #: 763-69-9	58°C (136°F)	Flammable Liquid, Category 3	Combustible Liquid, Class II

Hazardous Combustion products: carbon and nitrogen oxides, amines, aldehydes, hydrogen cyanide, lower molecular weight organic molecules, hydrogen chloride, hydrogen fluoride and other halogenated molecules. Creates dense black smoke when burned without sufficient oxygen.

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. 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.

Released: March 3, 2016

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. 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 for more details.

Methods and materials for containment and cleaning up: Product is flammable. Eliminate all sources of ignition. Use clean non-sparking tools to collect absorbed material. All equipment used when handling this product must be grounded. 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. 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. Approach release from upwind. Remove all ignition sources. Use spark-proof tools and explosion-proof equipment. 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 flammable. Check atmosphere for explosiveness and oxygen deficiencies. Eliminate all sources of ignition. Ground and bond containers and equipment before transferring to avoid static sparks. All equipment must conform to applicable electrical code. Use clean non-sparking tools. Carefully vent any internal pressure before removing closure. Handle empty containers with care; vapor/residue may be ignited and explode.

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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

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. Ground and bond containers and equipment. 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: Use only with adequate ventilation. Provide process enclosures, local exhaust ventilation or other engineering controls to maintain recommended PEL. All equipment must conform to applicable electrical code. Use clean non-sparking tools. Exhaust air may require cleaning by scrubbers or filters to reduce environmental contamination.

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:

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. Commonly used nitrile gloves may protect from brief contact, but have been found to degrade rapidly with exposure to the 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. 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 should be in close proximity.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to hazy liquid
Odor:	Sweet / solvent
Odor threshold:	Not available for mixture; A: ~60ppm
pH:	Not available
Melting point/ freezing point:	Not available for mixture; PCBTF: 36°C (97°F); A: -94°C (-137°F); EEP: -50°C (-58°F)
Initial boiling point and boiling range:	Not available for mixture; PCBTF: 139°C (282°F); A: 56°C (133°F); EEP: 166°C (331°F)
Flash point:	Not available for mixture; PCBTF: 43°C (109°F); A: -20°C (-4°F); EEP: 58°C (136°F)
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/ lower flammability or explosive limits:	Not available for mixture; PCBTF: 10.5% (V) / 0.9% (V); A: 13% (V) / 2.1% (V); EEP: 9.8% (V) / 1.05% (V)
Vapor pressure:	Not available for mixture; PCBTF: 5.3mm Hg @ 20°C and 7.63mm Hg; A: 181 mmHg @ 20°C; EEP: 2.30hPa (1.73mmHg) at 20°C (68°F)
Vapor density:	Not available
Relative density:	1.20-1.30
Solubility (water):	Insoluble
Partition coefficient n-octanol/water:	Not available for mixture; PCBTF: log Kow = 3.70; A: log Pow: 0.2; EEP: log Pow: 1.47
Auto-ignition temperature:	Not available for mixture; PCBTF: >500°C; A: 540°C; EEP: 377°C (711°F) at 1,013hPa
Decomposition temperature:	Not available for mixture; PCBTF: starts at 124°C
Viscosity:	Not available for mixture
Volatiles by volume	80%
Solids by weight	20%

PCBTF-Parachlorobenzotrifluoride, A-Acetone, EEP-Ethyl 3-ethoxypropionate

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Vapors may form explosive mixture with air. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Attacks rubber and certain plastics.

Chemical stability: Stable under recommended storage conditions. Due to flammability, product requires special attention during handling and storing. See Section 5.

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

Incompatible materials: Strong oxidizing agents. Strong acids and bases, peroxides, hypochlorites, perchlorates, nitrates, etc.

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, aldehydes, hydrogen cyanide, lower molecular weight organic molecules, hydrogen chloride, hydrogen fluoride and other halogenated molecules. Creates dense black smoke when burned without sufficient oxygen.

SECTION 11 – TOXICOLOGICAL INFORMATION

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

Symptoms of exposure:

Acute toxicity:

Oral: May be harmful if swallowed; however, available data are not sufficient for classification. Adverse symptoms may include abdominal pain, nausea and diarrhea.

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

Inhalation: It may give off-gas, vapor or mist that is irritating to the respiratory system, especially when heated. Adverse symptoms may include nausea, headache, difficulties with breathing.

Skin corrosion / irritation:

Irritating to skin. Prolonged excessive contact causes defatting of the skin, possibly leading to dermatitis.

Serious eye damage / eye irritation:

May cause serious eye irritation. Adverse symptoms may include tearing and redness.

Specific target organ toxicity, single exposure:

Product contains components that may affect respiratory and central nervous system after single exposure.

- Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6: May cause respiratory irritation.
- Acetone, CAS #: 67-64-1: May cause respiratory irritation. May cause drowsiness and dizziness.

Aspiration hazard: Not an aspiration hazard.

Chronic toxicity:
Respiratory and Skin Sensitizer:

- This product contains component that is reported to be a respiratory or skin sensitizer.
 - Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6: skin sensitizer

Germ cell mutagenicity:

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

Carcinogenicity:

This product does not contain component(s) known or reported to be carcinogenic by IARC, NTP, EPA, OSHA, ACGIH.

Reproductive toxicity:

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

Specific target organ toxicity, repeated exposure:

Liver, kidney, skin.

Medical conditions aggravated by overexposure:

Liver, kidney and skin if product is handled without adequate protection.

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

Components	Test Results
Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6	<p>Acute Toxicity Oral LD50 (Rat): 13,000 mg/kg Dermal LD50 (Rabbit): >3,300 mg/kg Inhalation LC50 (Rat), 4hrs: 33 mg/L Skin corrosion/irritation (Rabbit): irritating; may degrease skin. Serious eye damage/eye irritation (Rabbit): irritating. STOT, SE: Inhalation; May cause respiratory irritation. Aspiration Hazard: Not an aspiration hazard.</p> <p>Chronic Toxicity Respiratory and Skin Sensitization (Mouse): lymph node assay-positive (OECD Test Guideline 429); May cause sensitization by skin contact. Germ cell mutagenicity: not mutagenic in vivo and in vitro tests on bacterial and mammalian cell structures; in vitro (Salmonella typhimurium) with and without metabolic activation: negative (OECD Test Guideline 471, Ames-test); in vitro (Chinese hamster ovary) with and without metabolic activation: negative (chromosome aberration test) / in vivo (Rat): 0.5, 1.7, 5 mL/kg: negative (chromosome aberration assay test, bone marrow) Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA or ACGIH. Reproductive Toxicity: no sufficient data available STOT, RE: Oral (Rat, male, female), 3 months/daily: dose: 0, 10, 40, 150, 500 mg/kg bw; NOAEL: 40 mg/kg, LOAEL: 150 mg/kg; effects on liver; Oral (Rodents), 14, 28, and 90 days: significant liver and kidney toxicity at dose levels of 400-1,000 mg/kg/day. Significant increases in liver and kidney weights, clinical chemistry values and histopathological findings. Renal toxicity, occurred only in male rats, was due to "hyaline droplet" nephropathy and is therefore, highly unlikely to develop in man. The NOAEL's for all these studies range from 10 to 100 mg/kg/day. Inhalation (Rat, male), 4 months/24hrs daily: dose: 5.5, 20.5, 71.6, 440 mg/m³; NOAEL: 5.5 mg/m³, LOAEL: 20.5 mg/m³; effects on biochemical parameters Inhalation (Rat, male, female), 28days/6 hour/day, 5 days/week: dose: 0, 100, 250, 500, or 1000 ppm; Effects: increased liver and kidney weights at 250 ppm and above. Microscopic changes in male kidneys stained positive for alpha-2-U globulin and the effects were considered not relevant to humans. Liver cell hypertrophy was seen at all exposures in males. Liver changes were consistent with clinical chemistry and PCBTF-blood level analysis and are believed to be an adaptive response, due to increased liver metabolism. Inhalation (Rat), 90days/6hours/day, 5days/week: dose: 0, 10, 50 and 250 ppm; neurobehavioral study: effects only at 250 ppm. No centrilobular hypertrophy was observed at any level among recovery animals. No effects on the nervous system as measured by a functional observation battery, muscular activity measurements and neuropathology. A NOEL of 50 ppm was established in this study for liver hepatocyte hypertrophy in male and female rats. If the hepatocyte hypertrophy observed is considered to be an adaptive response to PCBTF, the NOAEL for this study is 250ppm.</p>
Acetone, CAS #: 67-64-1	<p>Acute Toxicity: Oral LD50 (Rat): 5,800 mg/kg; Behavioral: Altered sleep time (including change in righting reflex), Tremor, Headache. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Dermal LD50 (Guinea pig): 7,426 Inhalation LC50 (Rat), 4hrs: 32,000 ppm; 76mg/L; (Rat), 8hrs: 50,100 mg/m³; Drowsiness Dizziness Unconsciousness Skin corrosion/irritation (Rabbit), 24hrs: Mild skin irritation. Solvents may degrease the skin. Serious eye damage/eye irritation (Rabbit), 24hrs: irritating. (Draize Test)</p>

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	<p>STOT, SE: Central nervous system. May cause drowsiness or dizziness. Category 3 with narcotic effects. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects.</p> <p><u>Chronic toxicity:</u> Sensitization, skin and respiratory (Guinea pig): Not skin sensitizer (OECD 429, GPMT) Germ cell mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. in vitro: Mammalian cell gene mutation assay-Mouse lymphoma cells, Without metabolic activation: negative (OECD Test Guideline 476); Ames test-with and without metabolic activation: negative (OECD Test Guideline 471); Chromosome aberration test-Chinese hamster ovary (CHO)-with and without metabolic activation: negative (OECD Test Guideline 473) in vivo: Micronucleus test-Oral (mouse), 13weeks at doses 5,000, 10,000, 20,000 ppm: negative Carcinogenicity: Dermal (mouse, female), 365days (90%) or 424 d (100%) / 3 times per week: at dose: 0.1ml 90(71mg) or 100% (79mg): NOAEL: 79 mg: did not display carcinogenic properties. Reproductive toxicity: No impairment of fertility, embryotoxic or teratogenic effects have been observed in animal experiments. Effects on Fertility: Oral (rat, male), 7 days/week: at doses 0, 5000, 10000 mg/L; General Toxicity: Parent: LOAEL: 10,000; Fertility: 10,000; Effects on Fetal development: Inhalation (Rat), 7 days/week: at doses 0, 440, 2200, 11000 ppm; General Toxicity: Maternal: NOAEC: 2,200 ppm, Teratogenicity: NOAEC: 11,000 ppm, Embryo-fetal toxicity: NOAEC: 2,200 ppm (OECD Test Guideline 414) STOT, RE: Inhalation (Rat), 8weeks /5days a week: NOEL: 19,000 ppm-slightly reduced weight gain compared to controls; Oral (Rat), 90days: NOEL: 100 mg/kg; LOEL: 500 mg/kg - increased liver and kidney weights Oral (mouse, male), 13weeks, daily at doses 1250, 2500, 5000, 10000, 20000: NOAEL: 20000 (OECD Test Guideline 408) Oral (mouse, female), 13weeks, daily at doses 2500, 5000, 10000, 20000, 50000: NOAEL: 20000, LOAEL: 50000 (OECD Test Guideline 408) Based on Human Evidence: Kidney disorders, Skin disorders (Dermatitis)</p>
Ethyl 3-ethoxypropionate, CAS #: 763-69-9	<p><u>Acute Toxicity</u> Oral LD50 (Rat, male): >5,000 mg/kg; (Rat, female): 4,309 mg/kg (OECD Test Guideline 401) Dermal LD50 (Rabbit, male): 4,080 mg/kg; (Rabbit, female): 4,680 mg/kg (OECD Test Guideline 402) Inhalation LC50 (Rat, male), 6hrs: >998 ppm (highest concentration tested) (OECD Test Guideline 403) Skin corrosion/irritation (Rabbit), 4hrs: slightly irritating (OECD Test Guideline 404) Serious eye damage/eye irritation (Rabbit), 24hrs: Slightly irritating (OECD Test Guideline 405) STOT, SE: No data available Aspiration hazard: No <u>Chronic toxicity</u> Sensitization, skin and respiratory: Not skin sensitizer (Guinea pig maximization test) (OECD Test Guideline 406) Germ cell mutagenicity: In vitro: bacterial; chromosome aberration; mammalian: negative. In vivo: No data available Carcinogenicity: No data available Reproductive Toxicity: no data available. STOT, RE: Oral (Rat, male & female), 28days: NOAEL: 1,000 mg/kg (OECD Test Guideline 407) - Liver Irregularities Inhalation (Rat), 90days: NOAEL: 500 ppm - Nausea, Headache, Vomiting, Central nervous system depression, Dizziness</p>

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Acutely and chronically hazardous for aquatic organisms. Do not allow product to reach ground water, water course or sewage system.

Persistence and degradability: Not readily biodegradable.

Bioaccumulative potential: Not known.

Mobility in soil: Not expected.

Other adverse effects: Not known.

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

Components	Test Results
Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6	<p>Toxic to aquatic life with long lasting effects.</p> <p><u>Acute Toxicity</u> Fish: LC50 (Rainbow trout), 96hrs: 13.5 mg/L (Bluegill sunfish), 96hrs: 12.0 mg/L (Fathead minnow), 31 day: 0.54-1.4 mg/L; Triethylene glycol used as solvent carrier (Zebra fish), 96hrs: 3 mg/L (OECD Test Guideline 203, semi-static) BCF (Bluegill sunfish), 48hrs: 121.8 & 202.0 Aquatic invertebrates: EC50 (Daphnia magna), 48hrs: 12.4 mg/L MATC (Daphnia magna), 21 day: 0.03-0.05 mg/L; Acetone used as solvent carrier Aquatic plants: IC50 (Green & Blue-green algae), 72hrs: 500 mg/L; EC 50: >0.41 mg/L, growth rate (OECD Test Guideline 201, static test)</p> <p><u>Elimination data</u> Biodegradability: Not readily biodegradable; 19.2% in 28days (OECD Test Guideline 301D) Biotic: Inconclusive due to volatility; Abiotic: Atmospheric lifetime estimated to be 65.9 days for OH radical reaction. Bioaccumulation: PCBTF will preferentially partition to the atmosphere, due to its high volatility. It has been estimated that 99.93% of a 100 kg spill would end up in the atmosphere, while only 0.06% would partition to water. The aqueous solubility of PCBTF (29.1 mg/L) would also tend to limit its potential impact to exposed aquatic systems. PCBTF has exhibited significant toxicity to aquatic species under laboratory conditions, but is unlikely to exhibit a similar degree of acute toxicity under environmental conditions due to the aforementioned solubility and volatility issues. The moderate level of bioaccumulation measured in laboratory tests will also be subject to environmental mitigation due to PCBTF's physical/chemical properties. PCBTF should rapidly volatilize from dry and moist soils. Volatility, and relative environmental partitioning characteristics, make it unlikely that PCBTF represents a significant threat to aquatic or terrestrial environments. Log Kow: 3.7; Koc 420 – 530; Pow: 5,030 at 25C; Log Pow: 3.7 at 25C Mobility in soil: No data available Regulations: 40 CFR Protection of Environment, Part 82 Protection of Stratospheric Ozone-CAA Section 602 Class I Substances This product does not contain, nor was manufactured with Class I or II ODS.</p>
Acetone, CAS #: 67-64-1	<p><u>Acute Toxicity:</u> Fish (rainbow trout), 96hrs: LC50: 5,540 mg/L (static) Fish (Bluegill sunfish), 48hrs: LC50: 8,800 mg/L (static) Aquatic Invertebrates (Daphnia magna), 48hrs: EC50: 12,600 - 12,700 mg/L Aquatic Plants (algae), 14days: EC50: 3,020 mg/L Microorganisms (Bacteria), 15min: EC50: 14,500 mg/L</p>

	<u>Chronic toxicity:</u> Persistence and biodegradability: Readily biodegradable. 91% (OECD 301B) Bioaccumulative potential: Partition Coefficient: n-octanol/water: log Pow: -0.24 PBT and vPvB assessment: No data available. Mobility in soil: No data available.
Ethyl 3-ethoxypropionate, CAS #: 763-69-9	<u>Acute toxicity</u> Fish (fathead minnow), 96hrs: LC50: 55.3 mg/L (OECD Test Guideline 203, static test) Aquatic invertebrates (Daphnia magna), 48hrs: EC50: >785 mg/L (OECD Test Guideline 202, Immobilization test) Aquatic plants (green algae), 72hrs: EC50: >114.86 mg/L (OECD Test Guideline 201, Growth inhibition) Microorganisms (bacteria), 16hrs: IC50: >5,000 mg/L (Growth inhibition) <u>Ecological Data</u> Biodegradation, 28 days: 100% - Readily biodegradable (CO ₂ Evolution test) Bioaccumulation: No data available Mobility in soil: No data available Results of PBT and vPvB assessment: Log Kow: 1.35; Log Koc: 1.52 (QSAR Model) An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

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 highly flammable.

EPA Hazardous Waste Code: D001 (Ignitable waste), RQ: 100 lbs

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 1263	UN 1263	UN 1263
UN proper shipping name:	Paint related material	Paint related material	Paint related material
Transport hazard class(es):	3	3	3
Packing group:	II	II	II
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: 149, B52, IB2, T4, TP1, TP8, TP28 Exceptions: 150; Non bulk: 173 / Bulk: 242 Passenger aircraft rail: 5L / Cargo aircraft only: 60L / Location: B		

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 or impurities 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):

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

- Acetone, CAS #: 67-64-1: RQ: 5,000 lbs

Clean Air Act:

- Ozone Depleting Substances (ODS): This product does not contain and is not manufactured with ozone depleting substances.

Released: March 3, 2016

- Hazardous Air Pollutants, OSHA, Section 112(b), Table Z-1: The following components are listed:

Substance	Regulatory Limits				Recommended Limits	
	OSHA PEL		Cal/OSHA PEL	NIOSH REL		
	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		
Acetone, CAS #: 67-64-1	1,000	2,400	500 ppm; (ST) 750 ppm; (C) 3,000 ppm	250 ppm	ACGIH® 2015 TLV® 8-hour TWA, mg/m ³ 250 ppm; (ST) 500 ppm;	

ppm-parts per million; (C)-Ceiling, (ST)-Short Term Exposure Limit

Available Exposure Limits for Components not regulated by OSHA:

- Parachlorobenzotrifluoride (PCBTF), CAS #: 98-56-6: Corporate exposure limit: TWA: 25ppm/8hr
- Ethyl 3-ethoxypropionate, CAS #: 763-69-9: ACGIH TLV: TWA: 50 ppm; STEL: 100 ppm

Clean Water Act:

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

EPA Hazardous Waste Code: D001 (Ignitable waste)

NFPA rating: Health: 2 Fire: 3 Reactivity: 0 Special: 0
HMIS rating: Health: 2 Flammability: 3 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.

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 B2: Flammable 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
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: April 4, 2017

Date of the previous revision: New

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.