

**PRODUCT NAME(S): HP Urethane Resin (Part A)**

**SECTION 1 – IDENTIFICATION**

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

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

**Product name:** HP Urethane Resin (Part A) Clear  
HP Urethane Resin (Part A) Color - Dark Gray  
HP Urethane Resin (Part A) Color - Medium Gray  
HP Urethane Resin (Part A) Color - Light Gray  
HP Urethane Resin (Part A) Color - Adobe Tan  
HP Urethane Resin (Part A) Color - Mojave Sand

**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:**  
WARNING

**Pictogram(s):**



GHS 08



GHS 07



GHS 02

**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
Skin Sensitization	1	H317	May cause an allergic skin reaction
Carcinogenicity	2	H351	Suspected of causing cancer by inhalation and skin absorption
Reproductive Toxicity	2	H361	Suspected of damaging fertility or the unborn child by ingestion, inhalation and skin absorption
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 to central nervous system/brain, liver, kidney, blood, respiratory system/lungs and skin through prolonged or repeated exposure by ingestion, inhalation and skin absorption
Aquatic Hazard, Acute	3	H402	Harmful to aquatic life
Aquatic Hazard, Chronic	4	H413	May cause long lasting harmful effects to aquatic life
Flammable Liquids	3	H226	Flammable liquid and vapor

**Precautionary Statements:**

<b>Prevention:</b>	P201 P202 P281 P260 P271 P264 P273 P210 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. Avoid release to the environment. Keep away from flames and hot surfaces. No smoking. Ground container and receiving equipment. Use explosion proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
<b>Response:</b>	P303 + P361 + P353  P333 + P313 P363	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

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	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 + 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.
	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 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.
<b>Hazards not otherwise classified:</b>		Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 40-60%, depends on product.

**SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

Components	CAS #	EC #	Concentration, %				
			HPU-CO-A LG	HPU-CO-A MS	HPU-CO-A AT	HPU-CO-A DG, HPU-CO-A MG	HPU-CL-A
Titanium Dioxide	13463-67-7	236-675-5	30 – 40	20 – 30	10 – 15	5 - 10	-
Methyl n-Amyl Ketone	110-43-0	203-767-1	5 – 10	5 – 10	10 – 15	10 – 15	10 – 15
Diethylene glycol methyl ether	111-77-3	203-906-6	1 – 5	5 – 10	5 – 10	5 – 10	10 – 15
Ethylene Glycol Monobutyl Ether	111-76-2	203-905-0	1 – 10				
Cyclohexanone	108-94-1	203-631-1	1 – 5				
Xylene, mixed isomers	1330-20-7	215-535-7	1 – 5				
Hydroxyphenyl-benzotriazole-derivative	104810-48-2	600-603-4	0.1 – 1				
Hydroxyphenyl-benzotriazole-derivative	104810-47-1	600-602-9	0.1 – 1				
Pentamethyliperidyl Sebacate	41556-26-7	255-437-1	0.1 – 1				
Ethylbenzene	100-41-4	202-849-4	0.1 – 1				

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

<b>Inhalation:</b>	Remove the exposed person to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. Seek medical attention. 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.
<b>Skin:</b>	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.
<b>Eye:</b>	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.
<b>Ingestion:</b>	Remove the exposed person to fresh air and keep at rest in a position comfortable for breathing. Remove dentures if any. Call a POISON CENTER or doctor/physician if you feel unwell. 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.

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

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**General advice for First Aid responders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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 3 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.

Hazardous combustion products: carbon, nitrogen and titanium oxides, formaldehyde, ketones, aldehydes, lower molecular weight organic 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.

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:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure during pregnancy.

Product is flammable. Check atmosphere for explosiveness and oxygen deficiencies. Do not enter storage areas and confined spaces unless adequately ventilated. 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.

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**

<b>Appearance:</b>	Liquid
<b>Odor:</b>	Not available
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not available
<b>Melting point/ freezing point:</b>	Not available
<b>Initial boiling point and boiling range:</b>	138°C (280°F)
<b>Flash point:</b>	~38°C (100°F) - Pensky-Martens Closed Cup

<b>Evaporation rate:</b>	0.53 (butyl acetate = 1)
<b>Flammability (solid, gas):</b>	Not applicable
<b>Upper/ lower flammability or explosive limits:</b>	Upper: 13.1% / Lower: 1%
<b>Vapor pressure:</b>	0.1 kPa (0.786 mm Hg) at 20°C
<b>Vapor density:</b>	3.4 (Air = 1)
<b>Relative density:</b>	1.00 – 1.50
<b>Solubility (water):</b>	Not available
<b>Partition coefficient n-octanol/water:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Kinematic: at 25°C: >0.205 cm <sup>2</sup> /s (>20.5 cSt); at 40°C: >0.205 cm <sup>2</sup> /s (>20.5 cSt)

### SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** Vapors may form explosive mixture with air. It may attack rubber and certain plastics.

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

**Conditions to avoid:** Excessive heat (temperatures exciding the flash point), open flame and sparks, pressure, vapor and mist formation. Do not pressurize, cut, weld, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**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, nitrogen and titanium oxides, formaldehyde, ketones, aldehydes, lower molecular weight organic 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. Acute toxicity estimate: 3,460 mg/kg. Adverse symptoms may include irritation of mouth, throat and stomach, abdominal pain, central nervous system (CNS) depression.

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

**Inhalation:** May be harmful if inhaled. Acute toxicity estimate (gases): 54,809 ppm. Vapors are irritating to the eyes, nose and throat. Adverse symptoms may include red, itchy eyes, dryness of the throat, coughing, tightness in the chest, headache, dizziness, nausea, narcosis, fatigue and unconsciousness.

**Skin corrosion / irritation:**

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

**Serious eye damage / eye irritation:**

Liquid, aerosols or vapors cause serious eye irritation. Adverse symptoms may include pain, tearing, redness, itching. If left untreated, may result in corneal damage and injury is slow to heal.

**Specific target organ toxicity, single exposure:**

Product contains components that may cause respiratory irritation and drowsiness and dizziness after single exposure.

- Methyl n-amyl ketone, CAS #: 110-43-0
- Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2
- Xylene, CAS #: 1330-20-7
- Ethylbenzene, CAS #: 100-41-4

**Aspiration hazard:**

This product contains components that are classified as aspiration hazard. Product itself is not classified as aspiration hazard.

- Xylene, CAS #: 1330-20-7: Category 1
- Ethylbenzene, CAS #: 100-41-4: Category 1

**Chronic toxicity:**

**Respiratory and Skin Sensitizer:**

This product contains components that are reported to be a skin sensitizer. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

- Hydroxyphenyl-benzotriazole-derivatives, CAS #: 104810-47-1 and CAS #: 104810-48-2
- Pentamethyliperidyl Sebacate, CAS #: 41556-26-7

**Germ cell mutagenicity:**

This product does not contain components that are classified as mutagen hazard.

**Carcinogenicity:**

This product contains components suspected of causing cancer. Risk of cancer depends on duration and exposure level.

- Titanium dioxide, CAS #: 13463-67-7: IARC: Group 2B (Possibly Carcinogenic to Humans)
- Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans)

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- Cyclohexanone, CAS #: 108-94-1: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans)
- Xylene, CAS #: 1330-20-7: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans)
- Ethylbenzene, CAS #: 100-41-4: IARC: Group 2B (Possibly carcinogenic to humans)

**Reproductive toxicity:**

This product contains components that are suspected of damaging fertility or the unborn child:

- Diethylene glycol methyl ether, CAS #: 111-77-3
- Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2
- Cyclohexanone, CAS #: 108-94-1
- Xylenes, CAS #: 1330-20-7
- Ethylbenzene, CAS #: 100-41-4

Routes of entry: oral, inhalation, skin absorption. Adverse symptoms: reduced fetal weight, increase in fetal deaths, skeletal malformations.

**Specific target organ toxicity, repeated exposure:**

May cause damage to central nervous system/brain, liver, kidney, blood, respiratory system/lungs and skin through prolonged or repeated exposure.

Chronic exposure to organic solvents by inhalation and skin absorption may lead to various neurotoxic effects including permanent brain and nervous system damage. Symptoms include loss of memory, intellectual ability and coordination.

Repeated or prolonged skin contact can result in dry, defatted and cracked skin causing increased susceptibility to infection. Irritation may develop to dermatitis.

**Medical conditions aggravated by overexposure:**

Central nervous system/brain, liver, kidney, blood, respiratory system/lungs, skin disorders if product is handled without adequate protection.

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

Components	Test Results
Titanium Dioxide, CAS #: 13463-67-7	<p><u>Acute toxicity</u>  Oral LD50 (Rat): &gt;5,000 mg/kg; a very insoluble compound. The studies in several species, including man, show neither significant absorption nor tissue storage following ingestion of titanium dioxide.  Inhalation LC50 (Rat): &gt;6.82 mg/L  Skin corrosion/irritation (Rabbit): Slight or no skin irritation. Not dermally absorbed by humans.  Serious eye damage/eye irritation (Rabbit): Slight or no eye irritation.</p> <p><u>Chronic Toxicity</u>  Sensitization (Mouse): Not sensitizing on laboratory animals.  Germ cell mutagenicity: Non genotoxic.  Carcinogenicity: IARC: Group 2B: Possibly carcinogenic to humans; No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP, ACGIH and OSHA.  Titanium dioxide is a frequently used compound in lung clearance studies, where a biologically inert substance is required, however inhalation of high concentrations of fine or ultrafine titanium dioxide particles has been shown to result in pulmonary inflammation, fibrosis, and lung tumors in rats. The same inhalation effects were not observed in mice and hamsters and may be a rat-specific threshold phenomenon, dependent upon lung overloading at high exposure concentrations and possibly of little relevance to humans. Epidemiological data suggest that there is no carcinogenic effect associated with workplace exposure to titanium dioxide dust.  STOT, RE: Inhalation: Lung fibrosis; potential occupational carcinogen</p>
Methyl n-amyl ketone, CAS #: 110-43-0	<p><u>Acute Toxicity:</u>  Oral (Rat): LD50: 1,670 mg/kg; (Mouse): LD50: 730 mg/kg; Category 4 - Harmful if swallowed.  Dermal (Rat): LD50: &gt; 5,000 mg/kg (OECD Test Guideline 402)  Inhalation (Rat), 4hrs: LC50: &gt; 16.7 mg/L (OECD Test Guideline 403); Category 4 - Harmful if inhaled.  Skin corrosion/irritation (Rabbit), 4hrs: Mild skin irritation (OECD Test Guideline 404)  Serious eye damage/eye irritation (Rabbit): Mild eye irritation (OECD Test Guideline 405)  STOT, SE: May cause drowsiness or dizziness.  Aspiration Hazard: No data available.</p> <p><u>Chronic Toxicity:</u>  Respiratory and Skin Sensitization (Mouse): Did not cause sensitization on laboratory animals (OECD Test Guideline 429)  Germ cell mutagenicity: in vitro assay lymphocyte: negative; (Rat, female): negative  Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA or ACGIH.  Reproductive Toxicity: No data available.  STOT, RE: Central nervous system depression, (Human): stomach irregularities: kidney and liver.  Oral (Rat), 13 week/intermittent: LPTD: 45,500 mg/kg -changes in liver and bladder weight and urine composition</p>
Diethylene Glycol Methyl Ether, CAS #: 111-77-3	<p><u>Acute Toxicity:</u>  Oral LD50 (Rat): 7,128 mg/kg  Dermal LD50 (Rat): 9,404 mg/kg  Inhalation LC50: No data available.  Skin corrosion/irritation (Rabbit), 24hrs: Slight; (Guinea Pig), 24hrs: Slight  Serious eye damage/eye irritation (Rabbit): Slight  STOT, SE: No data available.  Aspiration hazard: No</p> <p><u>Chronic toxicity:</u>  Sensitization, skin and respiratory (Guinea pig): Does not cause skin sensitization. (GPMT)  Germ cell mutagenicity: No data available.  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, ACGIH.  Reproductive toxicity: Possible risk of congenital malformation in the fetus. Suspected human reproductive toxicant. High oral doses given to male animals produced testicular damage, caused toxicity in pregnant animals and produced birth defects in their offspring. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure.  STOT, RE: No data available.</p>

<p>Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2</p>	<p><u>Acute Toxicity:</u>  Oral LD50 (Rat, male): 880 mg/kg (OECD Test Guideline 401); Category 4 per GHS: Harmful if swallowed.  Dermal LD50 (Rat): 1,060 mg/kg (OECD Test Guideline 402); Category 4 per GHS: Harmful in contact with skin.  Intraperitoneal LD50 (Rat): 220 mg/kg; Intravenous LD560 (Rat): 307 mg/kg  Inhalation LC50, vapor: (Rat), 3hrs: &gt;4.9 mg/L; (Guinea Pig), 1hr: &gt;3.4 mg/L; Category 4 per GHS: Harmful if inhaled.  Skin corrosion/irritation (Rabbit), 20hrs: Causes skin irritation.  Serious eye damage/eye irritation (Rabbit), 24hrs: Causes serious eye irritation. (OECD Test Guideline 405)  STOT, SE: May cause respiratory irritation.  Aspiration hazard: No data available.</p> <p><u>Chronic toxicity:</u>  Sensitization, skin and respiratory (Guinea pig): Does not cause skin sensitization (OECD Test Guideline 406, GPMT)  Germ cell mutagenicity: (Hamster) ovary: negative (OECD Test Guideline 474); (Mouse, male): negative  Carcinogenicity: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans); ACGIH: A3 (Confirmed animal carcinogen); No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP and OSHA.  Reproductive toxicity: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.  STOT, RE: Oral (rat): NOAEL: &lt;69 mg/kg/day (OECD Test Guideline 408); Inhalation (rat): NOAEC: &lt;31 ppm; Dermal (rabbit): NOAEL: &gt;150 mg/kg/day (Skin Irritant)  Human exposure to levels ≥200 ppm can cause narcosis, damage to the kidney, liver and blood cells.  Swallowing results in a sour taste that turns to a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings.</p>
<p>Cyclohexanone, CAS #: 108-94-1</p>	<p><u>Acute Toxicity:</u>  Oral LD50 (Rat): 1,534 mg/kg  Dermal LD50 (Rabbit): 794 - 3,160 mg/kg  Inhalation LC50 (Rat), 4hrs: &gt; 6.2 mg/L; Adverse symptoms: breathing difficulties, shortness of breath, cough, headache, nausea, vomiting, lack of coordination. Inhalation of high concentrations may cause central nervous system depression.  Skin corrosion/irritation (Rabbit): Irritating to skin. (OECD Test Guideline 404)  Serious eye damage/eye irritation (Rabbit), 24hrs: Risk of serious damage to eyes.  STOT, SE: No data available.  Aspiration hazard: No data available.</p> <p><u>Chronic toxicity:</u>  Sensitization, skin and respiratory: No data available.  Germ cell mutagenicity: (S. typhimurium): negative (Ames Test); Human fibroblast: Laboratory experiments have shown mutagenic effects.  Carcinogenicity: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans). No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP and OSHA.  Reproductive toxicity: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.  Inhalation (Rat): LPTC: 105 mg/m<sup>3</sup>/4 hour (1-20 day pregnant): Effects on fertility; (Mouse): LPTC: 1,400 ppm/6 hour (6-17 day pregnant): Other effects on female, Effects on embryo or fetus: Fetotoxicity (except death, e.g., stunted fetus), Specific developmental abnormalities: Musculoskeletal system  Oral (mouse): LPTC: 11 gm/kg (8-12 day pregnant): Reproductive: Effects on newborn: Growth statistics (e.g., reduced weight gain)  STOT, RE: Prolonged or repeated exposure to skin causes defatting and dermatitis. in animals: liver, kidney damage.  To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.</p>
<p>Xylene, CAS #: 1330-20-7</p>	<p>Can affect by inhalation and skin absorption. Odor is not an adequate warning for overexposure to xylene.</p> <p><u>Acute Toxicity</u>  Oral LD50 (Rat): 3,523 mg/kg  Dermal LD50 (Rabbit): 12,126 mg/kg  Inhalation LC50 (Rat, gas), 4hrs: 5,000 ppm; Can irritate the nose and throat causing coughing and wheezing.  Skin corrosion/irritation (Rabbit), 24hrs: irritating.  Serious eye damage/eye irritation (Rabbit): Moderate eye irritation  STOT, SE: May cause respiratory irritation. May cause drowsiness and dizziness.  Aspiration hazard: May be fatal if swallowed and enters airways.</p> <p><u>Chronic toxicity</u>  Sensitization, skin and respiratory: No data available.  Germ cell mutagenicity: No data available.  Carcinogenicity: IARC: Group 3 (Not classifiable as to its carcinogenicity to humans).  Reproductive toxicity: May damage the developing fetus.  STOT, RE: Prolonged inhalation may result in headache, dizziness, nausea, loss of concentration, memory and muscle coordination, tremors, irritability and blurred vision, irritation of mucous membrane pneumonia and pulmonary edema. May cause mild changes in liver function, kidney impairment, hyperplasia and blood abnormalities. Effects on skin: defatting and dermatitis.</p>
<p>Hydroxyphenyl- benzotriazole- derivatives, CAS #: 104810-47-1 and CAS #: 104810-48-2</p>	<p><u>Acute Toxicity</u>  Oral LD50 (Rat): &gt;5,000 mg/kg (OECD Guideline 401)  Symptoms: drowsiness, gastrointestinal disturbance, liver and kidney disorders, muscle weakness.  Dermal LD50 (Rat): &gt;2,000 mg/kg (OECD Guideline 402)  Inhalation LC50 (Rat), 4hrs: &gt;5.8 mg/L (OECD Guideline 403). No mortality was observed.  Skin corrosion/irritation (Rabbit): not irritating (OECD Test Guideline 404)  Serious eye damage/eye irritation (Rabbit): not irritating (OECD Test Guideline 405)  STOT, SE: not expected.</p> <p><u>Chronic toxicity</u>  Respiratory or skin sensitization (Guinea pig): skin sensitizer (OECD Guideline 406)  Mutagenicity: Not mutagenic in bacteria, mammalian cell culture and mammals.  Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. Teratogenicity: In animal studies the substance did not cause malformations.  STOT, RE: May cause damage to the liver after repeated ingestion. Effect found in rodents only. The relevance to humans is questionable. Due to the species specific mode of action, the effects are not expected to occur in humans.</p>
<p>Pentamethyliperidyl Sebacate, CAS #: 41556-26-7</p>	<p><u>Acute Toxicity:</u>  Oral LD50 (Rat): &gt;5,000 mg/kg (OECD Guideline 401). Low toxicity after single ingestion.  Dermal LD50 (Rat): &gt; 2,000 mg/g (OECD Guideline 402)  Inhalation LC50 (Rat), 14days: &gt; 5,800 mg/L (OECD Guideline 403)  Skin corrosion/irritation (Rabbit): May cause slight irritation to the skin. (OECD Guideline 404)  Serious eye damage/eye irritation (Rabbit): Not irritating to the eyes. (OECD Guideline 405)  STOT, SE: No data available.  Aspiration hazard: No.</p>

	<p><u>Chronic toxicity:</u>          Sensitization, skin and respiratory (guinea pig): May cause sensitization by skin contact. (Guinea pig maximization test)          Germ cell mutagenicity: The substance was not mutagenic in bacteria.          Carcinogenicity: No data available.          Reproductive toxicity: No data available.          STOT, RE: Prolonged or repeated exposure may cause neurological disturbances.          Experimental/calculated data: rat (Wistar) (male/female) gavage 28 days 0,100,300,750,1000 mg/kg; NOAEL: 300 mg/kg</p>
Ethylbenzene, CAS #: 100-41-4	<p><u>Acute toxicity:</u> low.          Oral (Rat): LD50: 3,500 mg/kg;          Dermal (Rabbit): LD50: 15,433 mg/kg.          Inhalation (guinea pig), 8hrs: LPTC: 2,500 ppm: coma; (Human), 8hrs: LPTC: at 100 ppm: eye effects, sleep; (Human), 4hrs: at 10 ppm: decreased pulse.          Skin corrosion/irritation (Rabbit), 24hrs: Moderate skin irritation.          Serious eye damage/eye irritation (Rabbit), 24hrs: Mild eye irritation. Eye and throat sensitivity can occur when exposed to high levels.          STOT, SE: may cause drowsiness and dizziness.          Aspiration hazard: May be fatal if swallowed and enters airways.  <u>Chronic toxicity:</u>          Respiratory or skin sensitization (guinea pig): No data available.          Germ cell mutagenicity: Hamster ovary: negative; (Mouse, male/female): negative. In vivo genotoxicity studies are predominantly negative.          Carcinogenicity: IARC: Group 2B: Possibly carcinogenic to humans; EPA has not determined ethylbenzene to be a carcinogen; NTP: inhalation study in rats and mice. Exposure resulted in an increased incidence of kidney and testicular tumors in male rats, and trends of increased kidney tumors in female rats, lung tumors in male mice, and liver tumors in female mice. ACGIH: Confirmed animal carcinogen.          Reproductive toxicity: Inhalation (Rat): LPTC: 97 ppm/7 hour (15 day prior to copulation): Effects on fertility: Female fertility index; LPTC: 985 ppm/7 hour (1-19 day pregnant): Reproductive: Effects on embryo or fetus: Fetotoxicity (except death, e.g., stunted fetus); LPTC: 96 ppm/7 hour (1-19 day pregnant): Reproductive: Specific developmental abnormalities: Musculoskeletal system; LPTC: 600 mg/m<sup>3</sup>/24 hour (7-15 day pregnant): Reproductive: Effects on fertility: Post-implantation mortality (e.g., dead and/or resorbed implants; per total number of implants), Effects on embryo or fetus: Fetal death, Specific developmental abnormalities: Musculoskeletal system; Inhalation (Rabbit): LPTC: 99 ppm/7 hour (1-18 day pregnant): Reproductive: Effects on fertility: Litter size; LPTC: 500 mg/m<sup>3</sup>/24 hour (7-20 day pregnant): Reproductive: Effects on embryo or fetus: Fetotoxicity (except death, e.g., stunted fetus); LPTC: 1 gm/m<sup>3</sup>/24 hour (7-20 day pregnant): Reproductive: Effects on fertility: Abortion;          STOT, RE: Central nervous system depression (Nausea, Headache, Vomiting, Ataxia, Tremors); hearing organs; Stomach Irregularities (Based on Human Evidence); (male mice): NOAEL: 250 ppm. (female mice): NOAEL: 75ppm.          Hearing loss has been reported in rats (but not guinea pigs) exposed to relatively high exposures (400 ppm and greater).          Oral (Rat), 2 week- intermittent: LPTC: 8,993 mg/kg; hearing          Oral (Rabbit), 24 week- continuous: LPTC: 1,386 mg/kg; Brain and Coverings: Recordings from specific areas of CNS; Weight loss or decreased weight gain          Inhalation (Human), 7 year- intermittent: LPTC: 30 mg/m<sup>3</sup>; Headache, Irritability          Inhalation (Rat), 6 hour/4 week- intermittent: LPTC: 782 ppm; Changes in liver weight, Changes in leukocyte and platelet count.          Inhalation (Mouse), 6 hour/97 day- intermittent: LPTC: 975 ppm; Changes in liver weight, Changes in bladder weight; (Mouse), 6 hour/4 week- intermittent: LPTC: 782 ppm; Changes in liver weight.          Inhalation (Rabbit), 4 hour/30 week- intermittent: LPTC: 100 mg/m<sup>3</sup>; Changes in blood composition (e.g. TP, bilirubin, cholesterol) and leukocyte (WBC) count</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 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:

Components	Test Results
Titanium Dioxide, CAS #: 13463-67-7	<p>Aquatic toxicity:            Fish LC0 (orfe, freshwater fish), 48h: &gt;1,000 mg/L.            Persistence and degradability: Methods for the determination of biodegradability are not applicable to inorganic substances.            Bioaccumulative potential: The product is practically insoluble in water and not biodegradable.            Mobility in soil: No data available.            PBT and vPvB assessment is not required for inorganic substances.            Titanium dioxide is a stable compound that is insoluble in water and therefore would not be expected to be present in drinking water. Based on the lack of absorption as well as no identified toxicological effects of concern in animal testing, there are also no risk concerns for nontarget terrestrial organisms resulting from the use of titanium dioxide as an inert ingredient.</p>
Methyl n-amyl ketone, CAS #: 110-43-0	<p><u>Acute Toxicity:</u>            Fish (fathead minnow), 96hrs: LC50=126-137 mg/L (semi-static test)            Aquatic invertebrates (Daphnia magna), 48hrs: EC50: &gt;90.1 mg/L            Aquatic plants (green algae), 72hrs: EC50=98.2 mg/L (OECD Test Guideline 201)  <u>Elimination data</u>            Biodegradability: aerobic, 28days: 69% - Readily biodegradable (OECD Test Guideline 310)            Ratio BOD/ThBOD 1.77%; BOD-5: 1,770 mg/g; BOD-20: 2,000 mg/g; COD: 2,420 mg/g            Bioaccumulative potential: No data available            Mobility in soil: No data available            Results of PBT and vPvB assessment: No data available</p>
Diethylene Glycol Methyl Ether, CAS #: 111-77-3	<p><u>Acute Toxicity:</u>            Fish LC50: (fathead minnow), 96hrs: 5,741 mg/L; (goldfish), 24hrs: &gt; 5,000 mg/L; (Bluegill Sunfish), 96hrs: 7,500 mg/L            Aquatic Invertebrates (Daphnia magna), 48hrs: EC50: 1,192 mg/L            Aquatic Plants (green algae), 96hrs: EC50: 1,000 mg/L</p>



	<p><u>Ecological data:</u>  Persistence and degradability: 100 % - Readily biodegradable BOD/COD Ratio: 1.18 %  Partition Coefficient n-octanol / water (log Kow): Log Kow: -1.14  Bioaccumulative potential: No data available.  Mobility in soil: No data available.</p>
Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2	<p><u>Acute Toxicity:</u>  Fish (rainbow trout), 96hrs: LC50: 1,474 mg/L (OECD Test Guideline 203, static).  Aquatic Invertebrates (Daphnia magna), 48hrs: EC50: 1,550 mg/L (OECD Test Guideline 202, part 1, static)  Aquatic Plants (algae), 72hrs: EC50: 1,840 mg/L (OECD Test Guideline 201)  <u>Ecological data:</u>  Persistence and degradability: Readily biodegradable. 90.4% in 28 days (aerobic) (OECD Test Guideline 301B). The 10 day time window criterion is not fulfilled. Ratio BOD/ThBOD 88 %</p>
Cyclohexanone, CAS #: 108-94-1	<p><u>Acute Toxicity:</u>  Fish (fathead minnow), 96hrs: LC50: 527000 µg/L (Fresh water)  Aquatic Plants (algae), 72hrs: EC50: 32.9 mg/L; EC10: 3.56 mg/L (Exponential growth phase, Fresh water)  <u>Ecological data:</u>  Persistence and degradability: 90 - 100% - Readily biodegradable  Bioaccumulative potential: The low Kow value (0.805) indicates that cyclohexanone is unlikely to bioconcentrate in aquatic organisms; therefore the potential for secondary poisoning is low.  Mobility in soil: The calculated log Koc is 1.823. This low value indicates high mobility in soil.</p>
Xylene, CAS #: 1330-20-7	<p>Toxic to aquatic life.  <u>Acute toxicity</u>  Fish: LC50 (rainbow trout), 96hrs: 3.3 mg/L  Aquatic invertebrates: EC50 (Daphnia magna), 24hrs: 75.49 mg/L  Aquatic plants: EC50 (green algae), 14days: 72 mg/L (Growth inhibition)  <u>Chronic toxicity:</u> No sufficient data available for classification.  <u>Ecological Data</u>  Biodegradation: Readily biodegradable. In air, xylenes degrade by reacting with photochemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected. Atmospheric fate: According to a model of gas/particle partitioning of semivolatiles organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 14-26 hours. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.  Bioaccumulation: Not significant; BCF values: freshwater fish: 1-15 and saltwater fish and invertebrates: 1-24 in, and uptake and depuration both occurring rapidly.  Results of PBT and vPvB assessment: No data available</p>
Hydroxyphenyl-benzotriazole-derivatives, CAS #: 104810-47-1 and CAS #: 104810-48-2	<p><u>Acute Toxicity</u>  Fish: LC50 (Rainbow trout), 96hrs: 2.8mg/L (OECD 203, static)  Aquatic invertebrates: EC50 (Daphnia magna), 24hrs: 4 mg/L  Aquatic Plants: EC50 (algae), 72hrs: &gt;100 mg/l (growth rate), (OECD Guideline 201, static)  EC10 (algae), 72hrs: 10 mg/l (growth rate) (OECD Guideline 201, static)  <u>Chronic toxicity</u>  Aquatic invertebrates (Daphnia magna), 21 days: 0.78 mg/L (OECD Guideline 202, part 2, semistatic)  Soil living organisms LC0, (redworm) 14 days: &gt;1,000 mg/kg, (OECD Guideline 207, artificial soil)  LC0, (redworm) 56 days: &gt;100 mg/kg, (OECD Guideline 222, artificial soil)  <u>Ecological Data</u>  Activated sludge, EC0, 3hrs: 1,000 mg/L (OECD Guideline 209, static)  Bioaccumulative potential (golden orfe): Does not significantly accumulate in organisms.  Mobility in soil: expected adsorption to solid soil phase.</p>
Pentamethyliperidyl Sebacate, CAS #: 41556-26-7	<p>Very toxic to aquatic life with long lasting effects.*  Persistence and degradability: Not readily biodegradable by OECD criteria.*  *- The product has not been tested. The statement has been derived from the properties of the individual components.</p>
Ethylbenzene, CAS #: 100-41-4	<p>Ethylbenzene partitions to air from water and soil, and is degraded in air.  <u>Acute toxicity:</u> Toxic to aquatic life. Category 2.  Fish (Atlantic silverside), 96hrs: LC50: 5.1 mg/L  Aquatic invertebrates (Daphnia magna), 48hrs: EC50: 1.8- 2.4 mg/L  Aquatic plants (algae), 72hrs: EC50: 4.9 mg/L (OECD Test Guideline 201)  <u>Chronic toxicity:</u> Harmful to aquatic life with long lasting effects. Category 3.  Aquatic invertebrates (water flea), 7days: LC50=3.6 mg/L (static EPA Whole Effluent Testing Program method); (repro), 7days: IC50: 3.3 mg/L; (repro), 7days: LOEL: 1.7 mg/L; (repro), 7days: NOEL: 1.0 mg/lb  Terrestrial Plants (scarlet bean leaf), 1hr/vapor in air: EC50: ~27 mg/L.  <u>Ecological Data:</u>  Persistence and degradability: Readily biodegradable. Biodegradability aerobic: 70-80% in 28 days. Inherently biodegradable in water and in soil under aerobic conditions, and not rapidly biodegradable in anaerobic conditions. Photodegradation is the primary route of removal in the environment.  Bioaccumulative potential: not expected to bioaccumulate (BCF 1.1 – 15).  Mobility in soil: moderately adsorbed to soil.  PBT/vPvB assessment: No data available.</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 highly flammable.

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

**Released: April 14, 2016**

**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:
<b>UN number:</b>	UN 1263	UN 1263	UN 1263
<b>UN proper shipping name:</b>	Paint related material	Paint related material	Paint related material
<b>Transport hazard class(es):</b>	3	3	3
<b>Packing group:</b>	III	III	III
<b>Hazard Label</b>			
<b>Special precautions:</b>	Shipping descriptions are provided for informational purposes and do not consider container sizes and packaging. The presence of a shipping description for a particular mode of transport does not indicate that the product is packaged suitably for that mode of transport. Certain exceptions may be applied as outlined in 49 CFR 173.150. Special Provisions: B1, B52, IB3, T2, TP1, TP29 Exceptions: 150; Non bulk: 173 / Bulk: 242; Passenger aircraft rail: 60L / Cargo aircraft only: 220L / Location: A		

All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**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 component of this product is present above De Minimis level and therefore requires reporting.

- |   |                     |                  |
|---|---------------------|------------------|
| ○ Diethylene glycol methyl ether, CAS #: 111-77-3:  | in product: 1-15%;  | De Minimis: 1.0% |
| ○ Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2: | in product: 1-10%;  | De Minimis: 1.0% |
| ○ Xylene, mixed isomers, CAS #: 1330-20-7:          | in product: 1-5%;   | De Minimis: 1.0% |
| ○ Ethylbenzene, CAS #: 100-41-4:                    | in product: 0.1-1%; | 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:

- |  |               |
|--|---------------|
| ○ Cyclohexanone, CAS #: 108-94-1:          | RQ: 5,000 lbs |
| ○ Xylene, mixed isomers, CAS #: 1330-20-7: | RQ: 100 lbs   |
| ○ Ethylbenzene, CAS #: 100-41-4:           | RQ: 1,000 lbs |

**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		Cal/OSHA PEL	NIOSH REL		ACGIH® 2015 TLV®
	ppm	mg/m <sup>3</sup>	(as of 4/26/13) 8hrs TWA, mg/m <sup>3</sup>	(as of 4/26/13) Up to 10hrs TWA, mg/m <sup>3</sup>		
Titanium Dioxide, CAS #: 13463-67-7	Total dust	-	15	10 (as PNOR)	2.4 mg/m <sup>3</sup> (fine) Ca, 0.3 mg/m <sup>3</sup> (ultrafine), See Appendix A & C	10
Methyl n-amyl ketone, CAS #: 110-43-0		100	465	50	100	50
Ethylene Glycol Monobutyl Ether, CAS #: 111-76-2		50	240	20	5	20
Cyclohexanone, CAS #: 108-94-1		50	200	25	25	20
Xylene, mixed isomers, CAS #: 1330-20-7		100	435	100 ppm (ST) 150 ppm (C) 300 ppm	100 ppm (ST) 150 ppm	100 ppm (ST) 150 ppm
Ethylbenzene, CAS #: 100-41-4		100	435	100 ppm (ST) 125 ppm	100 ppm (ST) 125 ppm	20 ppm

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

NIOSH IDLH: Titanium dioxide, CAS #: 13463-67-7: 5000 mg/m<sup>3</sup>, Ca

**Clean Water Act:**

- Section 307(a) (Toxic pollutants):
  - Ethylbenzene, CAS #: 100-41-4
- Section 311(b)(2): Table 116.4A (Hazardous chemicals) / Table 117.3 (RQ):
  - Xylene, CAS #: 1330-20-7
  - Ethylbenzene, CAS #: 100-41-4

**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 contains chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
- Titanium dioxide (airborne, unbound particles of respirable size), CAS #: 13463-67-7
    - causes cancer; Date listed: September 2, 2011
  - Ethylbenzene, CAS #: 100-41-4
    - causes cancer; Date listed: June 11, 2004

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.

**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 14, 2016 – Preparation of SDS in accordance to the GHS requirements

**Date of the previous revision:** September 23, 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.