

PRODUCT NAME(S): Concrete Colorcoat

SECTION 1 – IDENTIFICATION

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

Product name: Concrete Colorcoat

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

Classification of the substance or mixture:

Hazard Class	Category	Hazard Statement Codes	Hazard Statements
Skin corrosion / Irritation	3	H316	Causes mild skin irritation
Serious eye damage / Eye irritation	2B	H319	Causes eye irritation
Carcinogenicity	1A	H350	May cause cancer by inhalation
Specific target organ toxicity, repeated exposure	2	H373	May cause damage to kidney by ingestion May cause damage to lungs by inhalation

Precautionary Statements:

Prevention: P201 Obtain special instruction before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P260 Do not breathe mist/ vapors/ spray.
P264 Wash exposed area with plenty of water and soap thoroughly after handling.

Response: P332 + P313 If skin irritation occurs: Get medical advice/attention.
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.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/container to hazardous or special waste collection point in accordance with local/regional/national/international regulations.

Hazards not otherwise classified: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 22.5%
Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS #	EC #	Concentration, %
Dipropylene Glycol Butyl Ether	29911-28-2	249-951-5	1 – 5
Titanium Dioxide	13463-67-7	236-675-5	1 – 5
Ethylene Glycol	107-21-1	203-473-3	1 – 5
Crystalline Silica (Cristobalite)	14464-46-1	238-455-4	0.05 – 0.15

SECTION 4 – FIRST-AID MEASURES

Description of First Aid measures:

Inhalation: Remove the exposed person to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory problems, seek medical attention. If not breathing, if breathing is irregular or if respiratory arrest occurs,

provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

- Skin:** 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. 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 get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

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

General advice for First Aid responders: Show this SDS to physician.

Note to physician: Treatment should be supportive and based on the judgment of the physician in response to the reaction of the patient. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Recommended medical monitoring for at least 24 hours.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

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

Specific hazards arising from the chemical: Material may be ignited if preheated to high temperatures (such in fire conditions). Fire in vicinity poses risk of pressure build-up and rupture. Containers at risk from fire should be cooled with water and, if possible, removed from the danger area. Hazardous Combustion products: carbon oxides, oxides of metals present in mixture, lower molecular weight organic molecules. Dense smoke is emitted 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. Fight fire with normal precautions from a reasonable distance. No action should be taken involving any personal risk or without suitable training.

Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Keep unnecessary and unprotected personnel from entering. Ensure adequate ventilation/exhaust extraction. Avoid breathing vapors or mist during clean up. Use protective equipment as described in Section 8. Do not touch or walk through spilled material, spilled material may cause a slipping hazard.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Inform the relevant authorities if the product has caused environmental pollution. See Section 12 for more details.

Methods and materials for containment and cleaning up: Remove mechanically; cover the remainder with non-combustible absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth). Following absorption, transfer into properly labeled chemical waste containers. If necessary, repeat application of absorbent material until all liquid has been removed from the surface. Remove residual with warm, soapy water. Scrubbing the surface with a broom or brush helps the decontamination solution to penetrate into porous surfaces. After cleaning, remove waste container and keep in a well ventilated area. Properly dispose of the waste material and any contaminated equipment (i.e., broom or brush) in accordance with existing federal, state and local regulations. For major spills: Stop leak if without risk. Approach release from upwind. Remove ignition sources. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or contain and collect with an absorbent material as described in the previous paragraph. For minor spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly with soap and water to remove residual contamination. Never return spills to original containers for re-use.

Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, see Section 1 for the Emergency contact; for further disposal measures, see Section 13.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. Keep away from sources of ignition. Do not reseal if contamination is suspected. Use adequate ventilation to keep airborne levels below the exposure limits. Do not breathe vapors and mists. Wear respiratory protection if material is heated, mixed, sprayed or used in a confined space. Adequate ventilation is required when sanding or abrading the dried film. Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash hands thoroughly after handling. Hands and/or face should be washed before eating, drinking and smoking and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in original or approved alternative container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect it against physical damage and moisture. Normal temperature and pressures do not affect the material. Keep liquid away from heat, sparks and flame. Do not cut, drill, grind, weld or perform similar operations on or near containers. Use appropriate containment to avoid environmental contamination.

Storage stability: Stable under normal conditions.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200. Employees and consumers should be warned of health risks associated with product use. See Section 8 for additional information on hygiene measures.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters/Occupational exposure limit values: Not available for mixture. Results for components are listed in Section 15.

Appropriate engineering controls: Good local and general ventilation should be sufficient to control worker exposure to airborne contaminants below recommended exposure limits. Local exhaust may be required in some areas.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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:

Impervious gloves (nitrile butyl rubber, neoprene or PVC) should be worn always when working with this product. Body should be covered with appropriate clothing (apron, arm covers or full body suit) depending on the task being performed and the risks involved. Protective clothing should be selected and used in accordance with “Guidelines for the Selection of Chemical Protective Clothing” published by ACGIH. Wash contaminated clothing before reuse. Store work clothing separately.

Appropriate footwear should be also selected based on the task being performed and the risks involved.

Respiratory protection:

Use local or general ventilation to control exposures below applicable exposure limits. When ventilation is inadequate, use either an atmosphere supplying respirator or NIOSH or OSHA approved air-purifying respirator for organic vapors. Respirator must be properly fitted and its selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Additional Protective Measures: Educate and train employees in safe handling of this product. Follow all label instructions. As a general hygiene practice, wash hands and face after use. Clean water should always be readily available for emergency skin and eye washing. Emergency eyewash fountains and safety shower are recommended in close proximity as a matter of good work practice.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Odor:	Not available
Odor threshold:	Not available
pH:	9
Melting point/ freezing point:	Not available
Initial boiling point and boiling range:	100°C (212°F)
Flash point:	>93.3°C (>199.9°F) - Closed cup
Evaporation rate:	0.09 (butyl acetate = 1)
Flammability (solid, gas):	Not applicable

Upper/ lower flammability or explosive limits:	20.4% / 0.6%
Vapor pressure:	0.31 kPa (2.33 mm Hg) at 20°C
Vapor density:	1 (Air = 1)
Relative density:	1.17
Solubility (water):	Not available
Partition coefficient n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Kinematic (RT): >0.07 cm ² /s (>7 cSt) Kinematic (40°C (104°F)): >0.07 cm ² /s (>7 cSt)
Heat of combustion (Aerosol product)	0.00002544 kJ/g

SECTION 10 – STABILITY AND REACTIVITY

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

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Avoid pressure and mist formation. Excessive heat, open flame and sparks.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Depend upon temperature, air supply and presence of other materials. Can include, but are not limited to carbon oxides, oxides of metals present in mixture, lower molecular weight organic molecules.

SECTION 11 – TOXICOLOGICAL INFORMATION

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

Symptoms of exposure:

Acute toxicity:

Oral: Not classified, but it is not excluded possibility that it may be harmful if swallowed. Adverse symptoms may include abdominal pain, nausea and diarrhea.

Dermal: Not expected.

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

Skin corrosion / irritation:

May cause temporary skin irritation. A more severe response may be expected if skin is abraded (scratched or cut).

Serious eye damage / eye irritation:

Causes eye irritation. Adverse symptoms may include tearing and redness.

Specific target organ toxicity, single exposure:

No data available.

Aspiration hazard: Not an aspiration hazard.

Chronic toxicity:

Respiratory and Skin Sensitizer:

This product does not contain components classified as a skin or respiratory sensitizer.

Germ cell mutagenicity:

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

Carcinogenicity:

This product contains components reported to be carcinogenic to humans.

- Silica dust, crystalline, in the form of quartz or cristobalite, CAS #: 14808-60-7:
 - IARC: Group 1 (Carcinogenic to humans)
 - NTP: Known to be a Human Carcinogen (Respirable size)
 - ACGIH: Group A2 (Suspected Human Carcinogen)
 - NIOSH: Potential occupational carcinogen
- Titanium dioxide, CAS #: 13463-67-7:
 - IARC: Group 2B (Possibly Carcinogenic to Humans)
 - ACGIH: Not classifiable as human carcinogen

Reproductive toxicity:

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

Specific target organ toxicity, repeated exposure:

Kidney, lungs/respiratory system.

Medical conditions aggravated by overexposure:

Kidney, lungs/respiratory system disorders, if product is handled without adequate protection.

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

Components	Test Results
Dipropylene Glycol Butyl Ether,	<u>Acute Toxicity:</u> Oral LD50 (Rat): 4,000 mg/kg

CAS #: 29911-28-2	<p>Dermal LD50 (Rat): > 2,000 mg/kg Inhalation LC50 (Rat), 4hrs: > 5.4 mg/L Skin corrosion/irritation (Rabbit): May cause mild skin irritation. Serious eye damage/eye irritation (Rabbit): May cause slight transient eye irritation. STOT, SE: No data available. Aspiration hazard: No data available. <u>Chronic toxicity:</u> Sensitization, skin and respiratory: No data available. 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: No data available. STOT, RE: No data available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.</p>
Titanium Dioxide, CAS #: 13463-67-7	<p><u>Acute toxicity</u> Oral LD50 (Rat): >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): >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. <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>
Ethylene Glycol, CAS #: 107-21-1	<p><u>Acute Toxicity</u> Oral LD50 (Rat): 7,712 mg/kg; Oral Lethal Dose (Human): 3 Ounces Dermal LD50 (Rabbit): >10,600 mg/kg; Dermal LD50 (Mouse): >3,500 mg/kg Inhalation LC50, aerosol (Rat), 6hrs: >2.5 mg/L Skin corrosion/irritation (Rabbit): Brief contact is nonirritating. Prolonged and repeated contact may cause slight skin irritation with local redness. Serious eye damage/eye irritation (Rabbit): Slightly irritating. Corneal injury is unlikely. <u>Chronic toxicity</u> Skin sensitization (Guinea pig): Non-sensitizing (GPMT); (Humans): data do not fully exclude a skin sensitizing potential. Genetic toxicity: Not mutagenic in bacteria, mammalian cell culture and mammals. Carcinogenicity: did not cause cancer in long-term animal studies. STOT, RE: May cause damage to kidney by ingestion.</p>
Crystalline Silica (Cristobalite), CAS #: 14464-46-1	<p><u>Acute Toxicity</u> Skin corrosion/irritation: not irritating Serious eye damage/eye irritation: can cause moderate eye irritation and may cause abrasion to the cornea. <u>Chronic Toxicity</u> Carcinogenicity: Contains respirable crystalline silica which is classified as a known human carcinogen. STOT, RE: Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis. In advanced stages, loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. The chronic health risks are associated with respirable particles of 3-4 um over protracted periods of time. For routine exposure and for individuals with existing respiratory illness (e.g., bronchitis, emphysema, chronic obstructive pulmonary disease) symptoms include shortness of breath, wheezing, cough, sputum production, weight loss, fever. Noted are also effects on liver based on human evidence. Hazards by inhalation associated with Crystalline Silica, respirable dust particles <10µ in diameter: <ul style="list-style-type: none"> • Silicosis: The prolonged and repeated inhalation of silica dust can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis can exist in several forms: chronic, accelerated, or acute and may lead to disability and death. • Lung Cancer: Workers with silicosis who smoke are at the greatest risk. Preventing the onset of silicosis will reduce the cancer risk. • Tuberculosis: If exposed to tuberculosis bacteria, individuals with chronic silicosis are at three time higher risk to develop pulmonary tuberculosis. • Non-Malignant Respiratory Diseases: Increased incidence of chronic bronchitis, emphysema and small airways disease. • Autoimmune and Chronic Kidney Diseases: Several studies have reported excess cases of several autoimmune disorders (scleroderma, systemic lupus, rheumatoid arthritis) and kidney diseases (including end stage renal disease) among silica-exposed workers. </p>

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability: Not known.

Bioaccumulative potential: Not known.

Mobility in soil: Not known.

Other adverse effects: Do not allow product to reach ground water, water course or sewage system.

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

Components	Test Results
Dipropylene Glycol Butyl Ether, CAS #: 29911-28-2	<p><u>Acute Toxicity:</u> Fish (guppy), 96hrs: LC50: 841 mg/L (OECD Test Guideline 203, static). Aquatic Invertebrates (Daphnia magna), 48hrs: EC50: 1,000 mg/L (OECD Test Guideline 202, part 1, static) Aquatic Plants (algae), 96hrs: EC50: 591 mg/L (OECD Test Guideline 201) Microorganisms (Sewage microbes): EC20: > 1,000 mg/L</p>

	<u>Ecological data:</u> Persistence and degradability: Not persistent. Readily biodegradable. Bioaccumulative potential: Does not significantly accumulate in organisms. Mobility in soil: No data available.
Titanium Dioxide, CAS #: 13463-67-7	<u>Aquatic toxicity:</u> Fish LC0 (orfe, freshwater fish), 48h: >1,000 mg/L. <u>Ecological Data:</u> 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 non-target terrestrial organisms resulting from the use of titanium dioxide as an inert ingredient.
Ethylene Glycol, CAS #: 107-21-1	<u>Acute Toxicity</u> Fish: LC50 (fathead minnow), 96hrs: 72,860 mg/L (EPA 72-1, static) Aquatic invertebrates: EC50 (Daphnia magna), 24hrs: >100 mg/L (OECD Guideline 202, part 1, static) Aquatic plants: EC50 (green algae), 96hrs: 6,500 - 13,000 mg/L (growth rate inhibition) <u>Chronic toxicity</u> Fish, 7days: NOEL: 15,380 mg/L Aquatic invertebrates, 7 days: NOEC: 8,590 mg/L <u>Ecological Data</u> Activated sludge EC20, 30min: 225 mg/L (respiration inhibition) (OECD Guideline 209) Biodegradability, anaerobic, 28days: 90-100% - Readily biodegradable (OECD Test Guideline 301B) Bioaccumulative potential: not expected due to the n-octanol/water distribution coefficient (log Pow). Mobility in soil: Potential for mobility in soil is very high.
Crystalline Silica (Cristobalite), CAS #: 14464-46-1	Not known to be ecotoxic; no data suggests that is toxic to birds, fish, invertebrates, microorganisms or plants.

SECTION 13 – DISPOSAL CONSIDERATIONS

Product Disposal: The generation of waste should be avoided or minimized wherever possible. If product becomes a waste, it does not meet criteria of hazardous waste as defined in 40 CFR 261, Subpart C and D. Do not discharge into sewer system. Spill cleanup residues may still be subject to RCRA storage and disposal requirements. Dispose waste in compliance with local, state and federal regulations via licensed waste disposal contractor.

Container disposal: Even after emptying, container may retain residues. Empty containers should be completely drained and safely stored until appropriately reconditioned or disposed through licensed contractor in accordance with government regulation. This material and its container must be disposed of in a safe way.

SECTION 14 – TRANSPORT INFORMATION

Land transport, U.S. DOT: Non-regulated
Sea transport, IMDG: Non-regulated
Air transport, IATA/CAO: Non-regulated

SECTION 15 – REGULATORY INFORMATION

U.S. Regulations:

OSHA HCS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29CFR 1910.1200.

TSCA Regulations:

All components of this product are listed or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

EPCRA Section 302 (40 CFR Part 355) (Emergency Response Planning, Extremely Hazardous Substance):

No components are subject to the reporting.

EPCRA Section 304 (40 CFR Part 355) (Emergency Release Notification Requirements):

No components are subject to the reporting.

EPCRA Sections 311 & 312 (Hazardous Chemical Inventory Reporting, Hazard Categories):

Acute Health Hazard, Chronic Health hazard

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

The following components are present above De Minimis level and therefore require reporting:

- o Ethylene Glycol, CAS #: 107-21-1: in product: 1-5% DeMinimis: 1.0%

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

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

- o Ethylene Glycol, CAS #: 107-21-1: RQ: 5,000lbs

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 and Z-3: The following components are listed:

Substance		Regulatory Limits			Recommended Limits	
		OSHA PEL		Cal/OSHA PEL	NIOSH REL	ACGIH® 2015 TLV®
		mppcf	mg/m ³	(as of 4/26/13) 8hrs TWA, mg/m ³	(as of 4/26/13) Up to 10hrs TWA, mg/m ³	8hrs TWA, mg/m ³
Titanium Dioxide, CAS #: 13463-67-7	Total dust	-	15	10 (as PNOR)	2.4 mg/m ³ (fine) 0.3 mg/m ³ (ultrafine), Ca; See Appendix A & C	10

Crystalline Silica (Cristobalite), CAS #: 14464-46-1	Total dust	-	30 ÷ 2x(%SiO ₂ +2)	-	-	-
	Respirable fraction	250 ÷ 2x(%SiO ₂ +5)	10 ÷ 2x(%SiO ₂ +2)	0.05	0.05; Ca See Appendix A	0.025 (for α-quartz & cristobalite)

mppcf – millions of particles per cubic foot; (C) - Ceiling; Ca - Potential occupational carcinogens; Appendix A, C and D refers to Appendixes of HAP List, Section 112(b) of Clean Air Act

Clean Water Act:

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

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

Crystalline Silica (airborne particles of respirable size)

- causes cancer; Date listed: October 1, 1988

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

International Regulations/Inventories:

Canada: All hazardous 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 5, 2016 – Preparation of SDS in accordance to the GHS requirements

Date of the previous revision: September 6, 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.