



SAFETY DATA SHEET

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

Product Name: RIO-CLEAN

Product Code: RIO-CLEAN Concrete Cleaner

Recommended Use: For industrial use only.

Rio Flooring Systems Inc.
2926 Chester Avenue
Cleveland, OH 44114
United States

www.riofloor.com

Email: info@riofloor.com
Phone: (877) 514-5336

Chemtrec: (800) 424-9300
Chemtrec Global: (703) 741-5970

SECTION 2: Hazard(s) Identification

HMIS Rating

0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

Health	Flammability	Instability	Other
1/1	1/1	0/0	0

CAUTION

May cause irritation with prolonged contact.

Do not get in eyes, on skin, on clothing. Do not take internally. Wear suitable protective clothing. Protect product from freezing. Use with adequate ventilation. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water.
Not flammable or combustible.

PRIMARY ROUTES OF EXPOSURE: Eye, Skin

HUMAN HEALTH HAZARDS - ACUTE:

Eye Contact: May cause irritation with prolonged contact.
Skin Contact: May cause irritation with prolonged contact.
Ingestion: Not a likely route of exposure. If swallowed rinse mouth, seek medical attention if symptoms persist.
Inhalation: Not a likely route of exposure. If inhaled remove victim to fresh air, rest in comfortable position for breathing.

SYMPTOMS OF EXPOSURE:

Acute: A review of available data does not identify any symptoms from exposure not previously mentioned.
Chronic: A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS:

A review of available data does not identify any worsening of existing conditions.

HUMAN HEALTH HAZARDS - CHRONIC:

Prolonged exposure to amorphous silica aerosols/mists/dusts may cause respiratory disease.
Our hazard evaluation has found that this product is not hazardous under 29 CFR 1910.1200

SECTION 3: Composition/Information on Ingredients

Chemical or Common Name/Synonyms	CAS Number	% by Wt.
Triethanolamine	102-71-6	<10%
Glycol Ether DB	112-34-54	>10%
Colloidal Silica	proprietary	1-20%

SECTION 4: First Aid Measures

EYE CONTACT: Flush affected area with water. Get medical attention.

SKIN CONTACT: Flush affected area with water. If symptoms develop, seek medical advice.

INGESTION: Do not induce vomiting without medical advice. If conscious, washout mouth and give water to drink. Get medical attention.

INHALATION: Remove to fresh air, treat symptomatically. If symptoms develop, seek medical advice.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

SECTION 5: Firefighting Measures

FLASH POINT: > 160 °F / > 70 °C (PMCC)

SUITABLE EXTINGUISHING MEDIA: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

SPECIAL FIREFIGHTING PROCEDURES: Firefighters wear NIOSH approved self-contained breathing apparatus. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

UNUSUAL FIRE HAZARDS: None.

SECTION 6: Accidental Release Measures

PERSONAL PRECAUTIONS:

Restrict access to area as appropriate until clean-up operations are complete. Stop or reduce any leaks if it is safe to do so. Do not touch spilled material. Ventilate spill area if possible. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection).

METHODS FOR CLEANING UP:

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. **LARGE SPILLS:** Contain liquid using absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS:

Do not contaminate surface water.

SECTION 7: Handling & Storage

HANDLING:

Avoid eye and skin contact. Do not take internally. Ensure all containers are labeled. Keep the containers closed when not in use. Use with adequate ventilation. Do not breathe vapors/gases/dust. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE CONDITIONS:

Protect product from freezing. Store the containers tightly closed.

SUITABLE CONSTRUCTION MATERIAL:

Mild steel, Stainless Steel 304, Stainless Steel 316L, Aluminum, Hastelloy C-276, Nylon, Plexiglass, Teflon, Kalrez

UNSUITABLE CONSTRUCTION MATERIAL:

Brass, Copper, Buna-N, Natural rubber, Polyethylene, HDPE (high density polyethylene), EPDM, Ethylene propylene, Polypropylene, Neoprene, Polyurethane, Viton, Alfax, Hypalon

SECTION 8: Exposure Controls / Personal Protection**OCCUPATIONAL EXPOSURE LIMITS:**

This product contains amorphous, colloidal or fumed silica. Should the product become dried or misted such that inhalation of the material is possible, standard hygiene practices should be utilized to ensure that exposure to respirable particles is within the regulated limits.

Chemical Name	OSHA/PEL (mg/m3)	ACGIH/TLV (mg/m3)
Amorphous Silica TWA	6	10 (total dust)

ENGINEERING MEASURES:

General ventilation is recommended. Local exhaust ventilation may be necessary when dusts or mists are generated.

RESPIRATORY PROTECTION:

Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved respirator. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

HAND PROTECTION:

Neoprene gloves, Nitrile gloves, Butyl gloves, PVC gloves

SKIN PROTECTION:

Wear standard protective clothing.

EYE PROTECTION:

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS:

Keep an eye wash fountain available. Keep a safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

HUMAN EXPOSURE CHARACTERIZATION:

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

SECTION 9: Physical & Chemical Properties

Physical State:	Liquid	pH (100 %):	9.4-10.4
Appearance:	Blue	Viscosity:	15 CPS @ 77 °F / 25 °C
Odor:	Slight solvent odor	Freezing Point:	32 °F / 0 °C estimated
Specific Gravity:	1.01-1.03 @ 77 °F / 25 °C	VOC Content:	Not determined
Density:	9.6-11.0 lb/gal		
Solubility In Water:	Complete		

Note: These physical properties are typical values for this product and are subject to change.

SECTION 10: Stability & Reactivity

STABILITY: Stable under normal conditions.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

CONDITIONS TO AVOID: Freezing temperatures.

MATERIALS TO AVOID: Contact with strong acids (e.g. sulfuric, phosphoric, nitric, hydrochloric, chromic, and sulfonic) may generate heat, splattering or boiling and toxic vapors.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions: None known

SECTION 11: Toxicological Information

The following results are for a similar product.

ACUTE ORAL TOXICITY:

Species	LD50	Test Descriptor
Rat	> 4190 mg/kg	Similar Product
Rating: Non-Hazardous		

PRIMARY SKIN IRRITATION:

Triethanolamine	Test Descriptor
0.4 / 8.0	Similar Product
Rating: Minimally irritating	

PRIMARY EYE IRRITATION:

Triethanolamine	Test Descriptor
3.3 / 110.0	Similar Product
Rating: Minimally irritating	

SENSITIZATION:

This product is not expected to be a sensitizer.

CARCINOGENICITY:

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the American Conference of Governmental Industrial Hygienists (ACGIH).

HUMAN HAZARD CHARACTERIZATION:

Based on our hazard characterization, the potential human hazard is: Low

SECTION 12: Ecological Information

ECOTOXICOLOGICAL EFFECTS: 4

No toxicity studies have been conducted on this product.

MOBILITY: The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models. If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	Water	Soil/Sediment
<5%	10-30%	30-50%

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION

Based on our hazard characterization, the potential environmental hazard is: Low

Based on our recommended product application and the product's characteristics, the potential environmental exposure is: Low

If released into the environment, see CERCLA/SUPERFUND in Section 15.

SECTION 13: Disposal Considerations

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous waste, it is not subject to federal regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

SECTION 14: Transport Information

The information in this section is for reference only and should not take the place of a shipping paper (bill of lading) specific to an order. Please note that the proper Shipping Name / Hazard Class may vary by packaging, properties, and mode of transportation. Typical Proper Shipping Names for this product are as follows.

LAND TRANSPORT:

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING TRANSPORTATION

AIR TRANSPORT (ICAO/IATA):

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO):

Proper Shipping Name: PRODUCT IS NOT REGULATED DURING TRANSPORTATION

SECTION 15: Regulatory Information

NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, none of the substances in this product are hazardous.

CERCLA/SUPERFUND, 40 CFR 117, 302:

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

Our hazard evaluation has found that this product is not hazardous under 29 CFR 1910.1200.

Under SARA 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are: 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

FOOD AND DRUG ADMINISTRATION (FDA) Federal Food, Drug and Cosmetic Act:

When use situations necessitate compliance with FDA regulations, this product is acceptable under: 21 CFR

176.170 Components of paper and paperboard in contact with aqueous and fatty foods and 21 CFR 176.180 Components of paper and paperboard in contact with dry foods.

Limitations: no more than required to produce intended technical effect.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40

CFR 116.4 / formerly Sec. 311:

This product may contain trace levels (<0.1% for carcinogens, <1% all other substances) of the following substance(s) listed under the regulation:

Substance (s)	Citations
Sodium Hydroxide	Sec. 311

CLEAN AIR ACT, Sec. 112 (40 CFR 61, Hazardous Air Pollutants), Sec. 602 (40 CFR 82, Class I and II Ozone Depleting Substances):

None of the substances are specifically listed in the regulation.

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

None of the substances are specifically listed in the regulation.

STATE RIGHT TO KNOW LAWS:

The following substances are disclosed for compliance with State Right to Know Laws: Colloidal Silica 7631-86-9

NATIONAL REGULATIONS, CANADA

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION: Not considered a WHMIS controlled product.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): The substances in this preparation are listed on the Domestic Substances List (DSL), are exempt, or have been reported in accordance with the New Substances Notification Regulations.

INTERNATIONAL CHEMICAL CONTROL LAWS

AUSTRALIA:

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

CHINA:

All substances in this product comply with the Chemical Control Law and are listed on the Inventory of Existing Chemical Substances China (IECSC).

EUROPE:

The substances in this preparation have been reviewed for compliance with the EINECS or ELINCS inventories.

JAPAN:

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Ministry of International Trade & Industry List (MITI).

KOREA:

All substances in this product comply with the Toxic Chemical Control Law (TCCL) and are listed on the Existing Chemicals List (ECL).

PHILIPPINES:

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippine Inventory of Chemicals & Chemical Substances (PICCS).

SECTION 16: Other Information

Due to our commitment to Product Stewardship, we have evaluated the human and environmental hazards and exposures of this product. Based on our recommended use of this product, we have characterized the product's general risk. This information should provide assistance for your own risk management practices. We have evaluated our product's risk as follows:

- * The human risk is: Low
- * The environmental risk is: Low

Any use inconsistent with our recommendations may affect the risk characterization. Our sales representative will assist you to determine if your product application is consistent with our recommendations. Together we can implement an appropriate risk management process.

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to insure safe workplace operations. Please consult your local sales representative for any further information.

Date Prepared: 11/21/2018

DISCLAIMER:

The information contained herein was received from our raw material suppliers and other sources. Rio Flooring Systems makes no express or implied warranties regarding the accuracy of the above information and therefore should not be exclusively relied upon. Product should be tested for chemical composition, and applicable safety and medical standards should be consulted. Rio Flooring Systems does not warrant the suitability of the product for any application by the user, including any implied warranties or merchantability or fitness for any particular purpose.