

SAFETY DATA SHEET

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

Issue Date: March 28, 2017

Revision Date: June 25, 2018

Version 2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Riosil Plus

Other Means of Identification

SDS #:

Recommended Use: Chemical Floor Hardener for Concrete

Restrictions on Use: No Data

Supplier of the Safety Data Sheet including Address:

Rio Flooring Systems Inc.
429 Lenox Avenue
Miami Beach, FL 33139

Telephone Numbers

Company Phone Number

Phone: 612-913-1514

Fax: 954-866-2237

Emergency Telephone : ChemTrec 800-424-9300

2. HAZARDS IDENTIFICATION

OSHA Hazards

Alkaline. Causes serious eye irritation and skin irritation.

Emergency Overview

Target Organs: Eye, Skin

GHS Classification

Skin Irritation Category 2

Eye Irritation Category 2A

Label Elements, including precautionary statements

Pictograms:



Signal Word: Warning

Hazard Statements:

H315 Causes skin irritation

H319 Causes serious eye irritation

Precautionary Statement(s)

Prevention:

- P264** Wash hands and skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P332+P313 If skin irritation occurs: Get medical advice or 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 or attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Hazards Not Otherwise Classified: Spilled material is slippery.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component

Water	CAS No. 7732-18-5	90-91%
Silicic acid, sodium salt	CAS No. 1344-09-8	9-10%

Ingredients not listed on this safety data sheet are considered to be non-hazardous according to OSHA 1910.1200 or are not present above their cutoff levels. Where a range is displayed, the exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes (A minimum of 15 minutes is recommended). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Ingestion: IF SWALLOWED: Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice or attention.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

Specific Hazards Arising from the Chemical

Not Applicable. Product is a Non-combustible Aqueous solution.

Hazardous Combustion Products

None known

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and full protective gear for firefighting.

Further Information

Product is compatible with all standard fire-fighting techniques.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment including protective clothing, eye and face protection. Spillage may be slippery.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or soil/vegetation.

Methods and Material for Containment and Cleaning Up

Contain spillage with sand, earth or a suitable adsorbent and transfer to a container for disposal according to local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes.

Conditions for Safe Storage, Including any Incompatibilities

Keep at a temperature not exceeding 38 Degrees C (100 Degrees F). Do not allow material to freeze. Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Unsuitable Containers: Aluminum

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component Exposure Limits

No occupational exposure limit has been assigned to Silicic acid, Sodium Salt. An exposure limit of 2 mg/m³ (15 min. TWA) is recommended by analogy with sodium hydroxide (UK EH40).

Appropriate Engineering Controls

Local Ventilation: Recommended

General Ventilation: Recommended

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection: Use proper protection – Safety Glasses as a minimum

Skin and Body Protection: Wash at mealtime and end of shift. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.). Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

Respiratory Protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before & after breaks and work day.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Color: Colourless

Odor: Odorless

Odor threshold: No Data

<u>Property</u>	<u>Value</u>	<u>Remarks – Method</u>
Vapor Pressure	Not Available	
Vapor Density	Not Available	
Relative Density	Not Available	
pH:	11	
Melting/Freezing Point	Not Available	
Solubility	Soluble in water	
Evaporation Rate	Not Available	
Flash Point	Not Relevant	
Flammability Limits	Not Relevant	
Flammability (Solid, gas)	Not Relevant	
Auto Ignition Temperature	Not Relevant	
Initial Boiling Point/Boiling Range	100 Degrees C	
Decomposition Temperature	Not Available	
Viscosity	Not Available	
Specific Gravity	1.08 at 25 Degrees C	9.0 lbs./gallon

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Possibility of Hazardous Reactions: When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis. Aqueous solutions will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Material can react violently if in contact with acids. Material can react with sugar residues to form carbon monoxide.

Conditions to Avoid: See note above.

Incompatible Materials: See note above.

Hazardous Decomposition Products

None Known

11. TOXICOLOGICAL INFORMATION

Potential Health Effects – Acute Toxicity

Ingestion	All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw.
Inhalation	Mist is an irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m3.
Skin	Causes skin irritation.
Eyes	Causes serious eye irritation.

Information on Physical, Chemical and Toxicological Effects:

See Acute Toxicity above

Delayed - Chronic Effects from Long-Term Exposure

None Known

Carcinogenicity: IARC, ACGIH, NTP, OSHA

None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish (Brachydanio rerio) LC50 (96 hrs.) 1108 mg/l

Aquatic invertebrates: (Daphnia magna) EC50 (48 hrs.) 1700 mg/l

Persistence and Degradability: Inorganic. Soluble silicates, upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.

Bioaccumulation: Inorganic. The substance has no potential for bioaccumulation.

Mobility: Not Applicable

Other Adverse Effects: The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes: This material is classified as hazardous waste under EC Directive 2008/98/EC and England and Wales Regulations SI 2005 No. 894. Offer surplus and non-recyclable solutions to a licensed disposal company. Disposal should be in accordance with local, state or national regulation.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

D.O.T.: Not Regulated

I.M.D.G.: Not Regulated

Marine Pollutant: No

I.A.T.A.: Not Regulated

15. REGULATORY INFORMATION

International Inventories

TSCA: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

US Federal Regulations

SARA 302: None

SARA 311/312 Hazard Categories: Acute: Yes

SARA 313 Hazard Categories: None

CWA (Clean Water Act): None

Supplemental State Compliance Information: None

U.S. EPA Label Information: No Data

16. OTHER INFORMATION

HMIS Classification:

Health hazard: 1

Flammability: 0

Physical Hazards: 0

NFPA Rating:

Health hazard: 1

Fire: 0

Reactivity Hazard: 0

Issuance Date: March 28, 2017

Revision Date: June 25, 2018

Revision Note: Reviewed and Updated

Date of Previous Version: June 20, 2014

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet