Safety Data Sheet (SDS)
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: RIOCOAT EMP Primer/Body Part B Product Code: RIOCOAT EMP Part B

Rio Flooring Systems Inc.
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Cleveland, OH 44114
United States

www.riofloor.com
info@riofloor.com
(888) 278-2183

Chemtrec:
800-424-9300
703-741-5970

Product Use: Flooring Epoxy

Section 2: Hazard(s) Identification

GHS Ratings:

Oral Toxicity	Acute Tox. 2	Oral>5+<=50mg/kg
Dermal Toxicity	Acute Tox. 1	Dermal<=50mg/kg
Skin corrosive	1B	Destruction of dermal tissue: Exposure < 1 hour Observation < 14 days, visible necrosis in at least one animal
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5
Skin sensitizer	1	Skin sensitizer
Reproductive toxin	1B	Presumed, Based on experimental animals

GHS Hazards

H300	Fatal if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P262	Do not get in eyes, on skin, or on clothing
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment, see supplemental first aid information.
P322	Specific measures (see … on this label)
P330	Rinse mouth
P361	Remove/Take off immediately all contaminated clothing

P363	Wash contaminated clothing before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P350	IF ON SKIN: Gently wash with soap and water
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P405	Store locked up
P501	Dispose of contents/container in accordance with local/regional/national/international regulations. Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

Signal Word: Danger

Unnecessary exposure to any chemical should be avoided. NOTICE--Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Do not breathe vapors or spray mist. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after applicable limits . Follow respirator manufacturer's directions for respirator use.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Propylene glycol diamine, 2-amino-, diether with Propylene	9046-10-0	20.00% - 30.00%
Phenol, 4-nonyl-, branched	84852-15-3	10.00% - 20.00%
4-tert-Butylphenol	98-54-4	10.00% - 20.00%
1,3-Benzenedimethanamine	1477-55-0	10.00% - 20.00%
Trimethylhexamethylenediamine	25620-58-0	5.00% - 10.00%
1-(2-Aminoethyl) piperazine	140-31-8	5.00% - 10.00%
Phenol, isobutylenated methylstyrenated	68457-74-9	5.00% - 10.00%

Section 4: First Aid Measures

After Inhalation: Immediately supply fresh air. Keep patient in restful and confortable position for breathing. If required provide artificial respiration, although this may be dangerous. Consult doctor if symptons persist.
After Eye Contact: Immediately rinse opened eye(s) for several minutes unter running water. Remove contact lens if worn. Get medical attention.
After Skin Contact: Immediately wash with water and soap, rinse thoroughly. Remove contaminated clothing and shoes. If skin irritation continues, consult a doctor.
After Swallowing: Immediately get medical attention. Call a poison center or physician. Rinse out mouth and then drink small amounts of water. Do not induce vomiting as this may be dangerous. Aspiration hazard if swallowed,

can enter lungs and cause damage. If vomiting occurs, the head should be kept low to avoid vomit entering the lungs. Maintain an open airway.

Notes to Physician: Treat symptomatically

Section 5: Firefighting Measures

Flash Point: 155 C (311 F)

LEL: UEL:

Extinguising Media:

Alcohol resistant foam
Fire-extinguishing powder
Carbon dioxide

Special Hazards Arising from the Substance of Mixture:

Formation of toxic gases is possible during heating or in case of fire. Check flammability in section 2 of this sheet.

Mixture in sealed and heated containers may cause explosion hazard .

Hazardous Combustion Products may include the following:

Carbon oxides
Metal oxide(s)
Can form explosive vapor-air mixtures
Vapors are heavier than air and may spread along floors. Vapors may travel considerable distance to source of ignition and flash back.

Advice for Firefighters:

Clear fire area of unprotected personnel. Containers that are exposed to intense heat should be cooled with water. Avoid spreading burning liquid with the water used for cooling purposes . Do not enter fire area without protective gear. Fight fire from safe distance or a protected location.

Fire Equipment:

Wear self-contained respiratory protective device . Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Wear protective clothing.
Keep from contacting skin or eyes.
Avoid breathing vapors, mist, or gas.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
If any equipment is necessary, ensure that it is non-sparking and electrically-protected .

Environmental precautions:

Do not allow product to reach sewage system or any water source.
In case of seepage into the ground inform responsible authorities
Prevent from spreading (e.g. by damming-in or oil barriers).
Keep contaminated washing water and dispose of appropriately

Methods and material for containment and cleaning up:

Ensure adequate ventilation
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste.
Do not flush with water or aqueous cleansing agents.
Send for recovery or disposal in suitable receptacles according to local, state and federal regulations .

Section 7: Handling and Storage

Handling:
Apply proper ventilation, possibly combined with local exhaust. Do not eat, smoke or drink during use.
For personal protection see Section 8.
Keep away from sources of ignition.
Keep material out of reach of children.
Use only explosion proof equipment.
Wash thoroughly after handling.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges by bonding and grounding product containers before and during material transfers.
Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities:
Storage:
Keep away from sources of ignition - no smoking. Store in a cool, well ventilated place. Keep in original, closed packaging. Comply with governmental regulations.
Keep container tightly closed
Do not store in direct sunlight

Specific end use(s):
FOR INDUSTRIAL USE ONLY!

Section 8: Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propylene glycol diamine, 2-amino-, diether with Propylene 9046-10-0	Not Established	3 mg/m3 (respirable fraction) ,	Not Established
Phenol, 4-nonyl-, branched 84852-15-3	Not Established	Not Established	Not Established
4-tert-Butylphenol 98-54-4	Not Established	Not Established	Not Established
1,3-Benzenedimethanamine 1477-55-0	Not Established	0.1 mg/m3 Ceiling	NIOSH: 0.1 mg/m3 Ceiling
Trimethylhexamethylenediamine 25620-58-0	Not Established	Not Established	Not Established
1-(2-Aminoethyl) piperazine 140-31-8	Not Established	Not Established	Not Established
Phenol, isobutylenated methylstyrenated 68457-74-9	Not Established	Not Established	Not Established

Ventilation:
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910 .94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas.

Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits .

Personal Protective Equipment/General Protective and Hygienic Measures:

Respiratory Protection:
In outdoor or open areas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of overspray during spray application. In restricted ventilation areas use (NIOSH/MSHA approved) chemical-mechanical filters designed to remove a combination of particulate and gas and vapor. In confined areas use (NIOSH/MSHA approved) airline type respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become airborne in the form of vapor or dust.

Protective Gloves:
Protective gloves are required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile. An apron should be worn to avoid skin contact. (Consult your safety equipment supplier.)

Eye Protection:
Avoid contact with eyes. Wear goggles if there is a likelihood of contact with eyes . (Consult your safety equipment supplier.) Eyewash stations and safety showers should be readily available in use and handling areas.
Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Body Protection:
Chemically resistance gloves, apron and safety goggles are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Contaminated Gear:
Dispose of in accordance with official regulations .

Section 9: Physical and Chemical Properties

Appearance: Clear to Yellow Liquid	**Odor:** Amine
Odor threshold: Not Determined	**Specfic Gravity:** 0.981878303
Lbs VOC/Gallon Less Water 0.58	**Coverage (sq ft/gal @ 1 mil)** 434
Autoignition (Theoretical): N/A	

Section 10: Stability and Reactivity

Product Stability:
Product is stable under normal circumstances.

UNSTABLE

Incompatibilities:
Avoid contact with strong oxidizing agents.

No data available

Hazardous Decomposition:
Thermal decomposition may form toxic materials; carbon dioxide, carbon monoxide, etc. Thermal decomposition may form toxic materials; carbon dioxide, carbon monoxide, various hydrocarbons, etc.

No data available

Hazardous polymerization will not occur.

Section 11: Toxicological Information

Mixture Toxicity

Oral Toxicity LD50: 11mg/kg
Dermal Toxicity LD50: 11mg/kg

Component Toxicity

84852-15-3	Phenol, 4-nonyl-, branched Oral LD50: 1,300 mg/kg (Rat) Dermal LD50: 2,031 mg/kg (Rabbit)
98-54-4	4-tert-Butylphenol Oral LD50: 3,250 µL/kg (Rat) Dermal LD50: 2,318 mg/kg (Rabbit)
1477-55-0	1,3-Benzenedimethanamine Oral LD50: 660 mg/kg (Rat) Dermal LD50: 2 g/kg (Rabbit) Inhalation LC50: 700 ppm (Rat)
140-31-8	1-(2-Aminoethyl) piperazine Oral LD50: 2,140 µL/kg (Rat) Dermal LD50: 880 µL/kg (Rabbit)

Routes of Entry:

No data available

Target Organs:

Eyes Kidneys Liver Skin Respiratory System

Effects of Overexposure

Carcinogenicity:

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) .

CAS Number	Description	% Weight	Carcinogen Rating
None			No data available

Section 12: Ecological Information

Environmental Impact Statement/Toxicity:

Aquatic toxicity: No further relevant information available
Persistence and degradability: No further relevant information available
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Other adverse effect: No further relevant information available

Component Ecotoxicity

Phenol, 4-nonyl-, branched	96 Hr LC50 Pimephales promelas: 0.135 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.1351 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 0.14 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: 0.36 - 0. 48 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.16 - 0. 72 mg/L [static]; 72 Hr EC50 Desmodesmus subspicatus: 1.3 mg/L
4-tert-Butylphenol	96 Hr LC50 Pimephales promelas: 4.71 - 5.62 mg/L [flow-through]; 96 Hr LC50 Cyprinus carpio: 6.9 mg/L [static] 48 Hr EC50 Daphnia magna: 3.9 mg/L; 48 Hr EC50 Daphnia magna: 3.4 - 4.5 mg/L [Static] 72 Hr EC50 Desmodesmus subspicatus: 11.2 mg/L
Trimethylhexamethylenediamine	72 Hr EC50 Desmodesmus subspicatus: 29.5 mg/L
1-(2-Aminoethyl) piperazine	96 Hr LC50 Pimephales promelas: 1950 - 2460 mg/L [flow-through]; 96 Hr LC50 Poecilia reticulata: >1000 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: >=100 mg/L [semi-static] 48 Hr EC50 Daphnia magna: 32 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 495 mg/L

Section 13: Disposal Considerations

Waste treatment methods:
Recommendation:
Must not be disposed of together with household garbage.
Do not allow product to reach sewage system.

Disposal of this product and any by-products must at all times comply with local, state and Federal regulations for hazardous wastes. All entities that store, transport or handle hazardous waste must take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals.

Contaminated Packaging:
Waste packaging should be recycled. Care should be taken when handling emptied containers that have not been cleaned. Empty containers retain some product residues. Vapor from that residue may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers.

Section 14: Transport Information

UN Number

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
ADR	Alkylphenols, liquid, N.O.S. (contains Nonylphenol)	UN3145	III	8
DOT	Alkylphenols, liquid, N.O.S. (contains Nonylphenol)	UN3145	III	8
EMS	Number: F-A, S-B			
IATA	Alkylphenols, liquid, N.O.S. (contains Nonylphenol)	UN3145	III	8
IMDG	Alkylphenols, liquid, N.O.S. (contains Nonylphenol)	UN3145	III	8
TDG	Alkylphenols, liquid, N.O.S. (contains Nonylphenol)	UN3145	III	8

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Country	Regulation	All Components Listed

EU Risk Phrases

Safety Phrase

U.S. - TSCA:
- None

U.S. - SARA:

Section 16: Other Information

DISCLAIMER

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