

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

Product Name.....GLACIER FLOOR SEALER/FINISH	Cas#: N/A, PREPARTION
Trade Name.....GLACIER FLOOR SEALER/FINISH	
Chemical Name..... N/A, PREPARTION	
Chemical Family.....DISPERSION	Date Prepared: August 29, 2015
Hazard Classification..... N/A, PREPARTION	Prepared by: S. Trenholm

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	INGREDIENT % RANGE
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	≥2.78-<5.56%
Ethanol, 2-butoxy-, phosphate (3:1)	78-51-3	≥0.56--<2.78%

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Color: White, milky  
 Physical State: liquid  
 Odor: glycol ether

#### POTENTIAL HEALTH EFFECTS

**Primary Routes of exposure: skin contact and inhalation**

**Signs and symptoms of acute exposure: The product, in the form supplied, is not anticipated to produce significant adverse human health effects.**

**Acute Eye: Slightly irritating. (data for solvent component).**

**Acute Skin: Slightly irritating. (data for solvent component).**

**Remarks: Handle in accordance with good industrial hygiene and safety practice. Dried product may stick to the skin causing irritation upon removal.**

### SECTION 4 – *FIRST AID MEASURES*

**Eyes:** Immediately flush eye(s) with plenty of water.

**Skin:** In case of contact, Immediately flush skin with plenty of water. Remove material from clothing. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Ingestion:** If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

**Inhalation:** If inhaled, remove victim to fresh air.

### SECTION 5 – *FIRE FIGHTING MEASURES*

#### **FIRE HAZARD DATA:**

**Flash Point and Method:** 200.98°F (93.88°C) (closed cup)

**Flammability Limits (vol/vol%): LOWER:** No data available **UPPER:** No data available

**Extinguishing Media (suitable):** Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam, water spray

**Protective Equipment:** Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand/NIOSH approved or equivalent).

**Further Firefighting Advice:** Fire fighting equipment should be thoroughly decontaminated after use.

**Fire and Explosion Hazards:** When burned, the following hazardous products of combustion can occur:

Carbon oxides

Hazardous organic compounds

### SECTION 6 – *ACCIDENTAL RELEASE MEASURES*

**In case of spill or leak:** Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate provincial or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

### SECTION 7 – *HANDLING AND STORAGE*

**Handling:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing.

**Storage:** Keep in a dry, cool place. This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage. Store in upright position only. Keep container closed when not in use.

**Storage Stability:** Stable under normal conditions. May coagulate if frozen at 0°C (32°F). Material may develop bacteria odor on long term storage.

**Storage Incompatibility - General:**

Store separate from: Strong bases, Strong oxidizing agents, Strong acids  
 May cause coagulation: Multivalent metal salts  
**Temperature tolerance – Do not store below:** - 34 °F (1 °C)  
**Temperature tolerance – Do not store above:** 100 °F (38 °C)

### SECTION 8 – EXPOSURES CONTROLS/PERSONAL PROTECTION

**Airborne Exposure Guidelines:**

**Ethanol, 2-(2-ethoxyethoxy)- (111-90-0)**

US. Workplace Environmental Exposure Level (WEEL) Guides  
 Time Weighted Average (TWA): 25 ppm (140 mg/m3)

**Remarks:** Listed

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

**Engineering Controls:** Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

**Respiratory Protection:** Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components (full face piece recommended). Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

**Eye/Face Protection:** Use good industrial practice to avoid eye contact.

**Skin Protection:** Minimize skin contamination by following good industrial hygiene practice. When handling this material, gloves of the following type(s) should be worn: Neoprene, nitrile, Polyvinylchloride, Natural Rubber, butyl-rubber, Chlorinated polyethylene, polyethylene (PE), ethyl vinyl alcohol laminate (EVAL).

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	white, milky	<b>Vapor Density (Air=1):</b> no data available
<b>Physical State:</b>	liquid	<b>Vapor Pressure:</b> No data available
<b>Odor:</b>	Typical Acrylic	<b>Boiling Point:</b> 100°C (212°F) (data for Water (7732-18-5))
<b>pH:</b>	Not applicable	<b>Freezing Point:</b> 32°F (0°C) (data for Water (7732-18-5))
<b>Density:</b>	calculated 1.043 g/cm3	<b>Solubility in Water:</b> miscible
<b>Specific Gravity, g/ml:</b>	calculated 1.043 Water=1 (liquid)	

### SECTION 10 - *STABILITY AND REACTIVITY*

**Stability:** This material is chemically stable under normal and anticipated storage, handling and processing conditions.

**Stability-Conditions to avoid:** See HANDLING AND STORAGE section of this MSDS for specified conditions. See Hazardous Decomposition Products below.

**Materials to Avoid:** Strong acids, Strong bases, Strong oxidizing agents  
May cause coagulation: Multivalent metal salts

**Hazardous Decomposition Products:** Thermal decomposition giving flammable and toxic products : Hazardous organic compounds, Carbon oxides

**Hazardous Polymerization:** Hazardous polymerization does not occur.

### SECTION 11 - *TOXICOLOGICAL INFORMATION*

Data for this material and/or its components are summarized below.

#### **Data for Styrene Acrylic Coolymer (Proprietary):**

##### Other information

The information presented is from representative materials with this Chemical Abstract Service (CAS) Registry number. The results vary depending on the size and composition of the test substance. Effects due to processing releases or residual monomer: Possible cross sensitization with other acrylates and methacrylates

#### **Data for Ethanol, 2-(2-ethoxyethoxy)- (111-90-0)**

##### **Acute toxicity**

###### **Oral:**

Practically nontoxic. (rat) LD50 = 5,340 - 15,918 mg/kg.

Practically nontoxic. (mouse) LD50 = 6,031 - 7,863 mg/kg.

###### **Dermal:**

Practically nontoxic. (rabbit) LD50 = 9,143 mg/kg.

###### **Inhalation:**

Practically nontoxic. (rat) 4 h LC0 > 5.24 mg/l. (aerosol)

###### **Skin Irritation:**

Practically non-irritating. (rabbit)

###### **Eye Irritation:**

Slightly irritating. (rabbit)

###### **Repeated dose toxicity**

Subchronic oral administration to dog / affected organ(s): kidney, liver / signs: changes in body weight, changes in organ weights, changes in organ structure or function

Subchronic oral administration to rat / affected organ(s): Thyroid gland, kidney, liver, spleen, heart / signs: changes in organ weights, changes in organ structure or function

Repeated dermal administration to rabbit / No adverse systemic effects reported.

Repeated inhalation administration to rat / Local irritation of the respiratory system

###### **Genotoxicity**

###### **Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria

###### **Genotoxicity**

###### **Assessment in Vivo:**

No genetic changes were observed in a laboratory test using: rats, mice

###### **Developmental toxicity**

Exposure during pregnancy. oral, dermal (rat) / No birth defects were observed.

Exposure during pregnancy. oral (mouse) / No birth defects were observed.

###### **Reproductive effects**

Two generation reproduction study. drinking water (mouse) / No toxicity to reproduction  
Reproduction Test. oral (rat) / No toxicity to reproduction

### Human experience

#### **Skin contact:**

Skin: No skin allergy was observed (studied using human volunteers)

### **Data for Ethanol, 2-butoxy-, phosphate (3:1) (78-51-3)**

#### Acute toxicity

##### **Oral:**

Practically nontoxic to slightly toxic. (rat) LD50 = 4,640 - 13,278 mg/kg.

##### **Dermal:**

No more than slightly toxic. (rabbit) LD50 > 5,000 mg/kg.

##### **Inhalation:**

Practically nontoxic. (rat) 4 h LC0 > 6.4 mg/l. (aerosol)

##### **Skin Irritation:**

Slightly irritating. (rabbit) Irritation Index: 2.32. (4 h)

##### **Eye Irritation:**

Slightly irritating. (rabbit)

##### **Skin Sensitization:**

Not a skin sensitizer. Buehler Test. (guinea pig) No skin allergy was observed  
Skin sensitizer. LLNA: Local Lymph Node Assay. (mouse) Skin allergy was observed.

#### Repeated dose toxicity

Subchronic oral administration to rat / affected organ(s): liver, heart / signs: changes in organ weights, changes in organ structure or function, blood chemistry changes, changes in body weight

Repeated dermal administration to rabbit / affected organ(s): skin / signs: Irritation / No adverse systemic effects reported.

#### Genotoxicity

##### **Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

##### **Genotoxicity**

##### **Assessment in Vivo:**

No genetic changes were observed in a laboratory test using: mice

#### Developmental toxicity

Exposure during pregnancy. oral (rat) / No birth defects were observed.

### Human experience

#### **Skin contact:**

Skin: No skin allergy was observed. (studied using human volunteers)

## SECTION 12 - *ECOLOGICAL INFORMATION*

### Chemical Fate and Pathway

Data on this material and/or its components are summarized below.

#### **Data for Ethanol, 2-(2-ethoxyethoxy)- (111-90-0)**

##### **Biodegradation:**

Readily biodegradable (20 d) biodegradation 87 %

#### **Data for Ethanol, 2-butoxy-, phosphate (3:1) (78-51-3)**

##### **Biodegradation:**

Readily biodegradable. (28 d) biodegradation 97 %

**Octanol Water Partition Coefficient:** log Pow 3.75

### Ecotoxicology

Data on this material and/or its components are summarized below.

**Data for Ethanol, 2-(2-ethoxyethoxy)- (111-90-0)**

**Aquatic toxicity data:**

Practically nontoxic. Pimephales promelas (fathead minnow) 96 h LC50 = 11,775 mg/l

Practically nontoxic. Gambusia affinis (Mosquito fish) 96 h LC50 = 14,050 mg/l

Practically nontoxic. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 13,400 mg/l

**Aquatic invertebrates:**

Daphnia magna (Water flea) 48 h LC50 = 1,982 - 4,005 mg/l

**Algae:**

Practically nontoxic. Scenedesmus subspicatus 72 h ErC50 = 198 mg/l

Slightly toxic. Scenedesmus subspicatus 72 h EbC50 = 98 mg/l

**Microorganisms:**

Aerobic wastewater bacteria 16 h EC50 > 5,000 mg/l

**Data for Ethanol, 2-butoxy-, phosphate (3:1) (78-51-3)**

**Aquatic toxicity data:**

Slightly toxic. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 24 mg/l

Slightly toxic. Pimephales promelas (fathead minnow) 96 h LC50 = 11.2 mg/l

**Aquatic invertebrates:**

Slightly toxic. Daphnia magna (Water flea) 48 h EC50 = 53 mg/l

**Algae:**

Slightly toxic. Pseudokirchneriella subcapitata (green algae) 72 h EC50 = 61 mg/l

**Microorganisms:**

Practically nontoxic. Activated sludge 3 h EC50 > 1,000 mg/l

SECTION 13 - *DISPOSAL CONSIDERATIONS*

**Waste disposal:**

Disposal via incineration is recommended. Dispose of in accordance with federal, provincial and local regulations. Consult a regulatory specialist to determine appropriate provincial or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, provincial and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

SECTION 14 - *TRANSPORT INFORMATION*

**US Department of Transportation (DOT):** not regulated

**International Maritime Dangerous Goods Code (IMDG):** not regulated

SECTION 15 - *REGULATORY INFORMATION*

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 144

DSL

This product contains one or several components that are not on the Part II, Vol. 144) Canadian DSL nor NDSL lists.

US. Toxic Substances Control Act

TSCA

The components of this product are all on the TSCA Inventory.

**United States – Federal Regulations**

**SARA Title III – Section 302 Extremely Hazardous Chemicals:**

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

**SARA Title III - Section 311/312 Hazard Categories:**

No SARA Hazards

**SARA Title III – Section 313 Toxic Chemicals:**

<u>Chemical Name</u>	<u>Cas-No.</u>	<u>De minimis Concentration</u>	<u>Reportable Threshold:</u>
Ethanol, 2-butoxy-, Phosphate (3:1)	78-51-3	1.0%	4540 Kg (10000 lbs.) (Otherwise Used (nonmanufacturing/ processing))
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	1.0%	4540 Kg (10000 lbs.) (Otherwise Used (nonmanufacturing/ processing)) 11350 Kg (25000lbs.) (Manufacturing and processing)

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Reportable Quantity (RQ):**

<u>Chemical Name</u>	<u>Cas-No.</u>	<u>Reportable quantity</u>
Carbonic Acid, diammonium salt	506-87-6	2268 Kg (5000 lbs)
Potassium Hydroxide K(OH)	1310-58-3	454 Kg (1000 lbs)
Ammonium Hydroxide (NHR)(OH)	1336-21-6	454 Kg (1000 lbs)

**OSHA Regulated carcinogens (NTP, IARC, OSHA Listed):**

**NTP:** 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.

**IARC:**

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.

**OSHA:**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**United States – State Regulations**

**New Jersey Right to Know**

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethanol, 2-butoxy-, phosphate (3:1)	78-51-3
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0

**Pennsylvania Right to Know – Environmentally Hazardous Substance(s)**

<u>Chemical Name</u>	<u>CAS-No.</u>
Ethanol, 2-butoxy-, phosphate (3:1)	78-51-3
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0

**California Prop. 65**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects

### HMIS Rating

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PROTECTIVE EQUIPMENT	B

KEY: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal

Protection=B (goggles and gloves)

HMIS – Hazardous Materials Identification System

### PREPARATION INFORMATION

Rockwater believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Reliable Solutions Inc., Reliable Solutions Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.