

# SAFETY DATA SHEET



## Section 1. Identification

**Product Name: Bridge Deck Surface Activator**  
**Bridge Preservation, LLC**  
**686 S. Adams Street**  
**Kansas City, KS 66105**  
**913.912.3305**

Spill, leak, fire, exposure, or accident, call  
CHEMTREC day or night  
Domestic North America **800.424.9300**  
International **703.527.3887**  
**e-mail: ehs@versaflex.com**

## Section 2. Hazards Identification

### GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ ( $140^{\circ}\text{F}$ )
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Reproductive toxin	1B	Presumed, Based on experimental animals

### GHS Hazards

H226	Flammable liquid and vapour
H315	Causes skin irritation
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
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash exposed skin thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P321	Specific treatment (as detailed on this label)
P362	Take off contaminated clothing and wash before reuse

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
P308+P313	IF exposed or concerned: Get medical advice/attention
P332+P313	If skin irritation occurs: Get medical advice/attention
P370+P378	In case of fire: Use foam, CO2 or dry powder for extinction (water may be used in copious quantities)
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**Danger**



### Section 3. Composites/Information on Ingredients

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propylene glycol monomethyl ether 107-98-2 80 to 90%	OELs not established vacated PELs - 150 ppm STEL vacated PELs - 540 mg/m <sup>3</sup> STEL vacated PELs - 100 ppm TWA vacated PELs - 360 mg/m <sup>3</sup> TWA	TLV - 100 ppm STEL TLV - 50 ppm TWA	
1-Methyl-2-pyrrolidone 872-50-4 10 to 20%	OELs not established	TLV - 100 mg/L Medium: urine Time: end of shift Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone	

### Section 4. First-aid Measures

Move exposed person to fresh air. If breathing is labored, oxygen should be administered by qualified personnel.

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

After contact with skin, wash immediately with plenty of warm, soapy water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Get medical attention if symptoms appear.

## Section 5. Fire-fighting Measures

**Extinguishing Media:** Water, Foam, CO2 or dry powder.

**Caution:**

Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. When product is stored in closed containers, a flammable atmosphere can develop.

Electrically ground and bond all equipment. Flammable mixtures of this product are readily ignited even by static discharge. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Flammable mixtures may exist within the vapor space of containers at room temperature.

**Hazardous decomposition products:**

During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Special protective actions for fire-fighters:**

Promptly isolate the scene by removing all persons from the vicinity of the incident, if there is a fire. No action shall be taken involving any personal risk or without suitable training. Water may not be effective in extinguishing fire. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of material reigniting has passed.

**Special protective equipment for fire-fighters:**

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet and protective clothing should be worn.

## Section 6. Accidental Release Measures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Keep personnel out of low areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and Storage

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and

protective equipment before entering eating areas. Do not get into eyes.

Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and may be hazardous.

Ground and bond all containers and handling equipment. If pumping, utilize explosion-proof equipment.

Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Keep away from heat, sparks and flame. Do not smoke during handling of this material.

Material is to be stored in accordance with local regulations. Store in original container protected from direct sunlight in a dry and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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. Do not store in unlabeled containers.

Use appropriate containment to avoid environmental contamination.

Flammable mixtures may exist within the vapor space of containers at room temperature. Keep container closed. Minimize sources of ignition, such as static build-up, heat, spark or flame. Do not smoke in storage area.

Unsuitable containers: Do not store in containers made of aluminum, copper, copper alloys or galvanized surfaces.

## Section 8. Exposure Controls/Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Propylene glycol monomethyl ether 107-98-2	OELs not established vacated PELs - 150 ppm STEL vacated PELs - 540 mg/m <sup>3</sup> STEL vacated PELs - 100 ppm TWA vacated PELs - 360 mg/m <sup>3</sup> TWA	TLV - 100 ppm STEL TLV - 50 ppm TWA	
1-Methyl-2-pyrrolidone 872-50-4	OELs not established	TLV - 100 mg/L Medium: urine Time: end of shift Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone	

**Engineering Controls:** Use only with adequate ventilation.

**Ventilation:** 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.

**Protective Gear:** In case of inadequate ventilation, wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Chemical-resistant, impervious gloves should be worn when handling this material. Preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL").

Acceptable glove barrier materials include: Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl").

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors, such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications produced by the glove supplier.

Safety eyewear should be used to avoid exposure to liquid splashes and mists. Goggles are the preferred eyewear safety for this material.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 9. Physical and Chemical Properties

<p><b>Appearance:</b> Clear</p> <p><b>Vapor Pressure:</b> No Data</p> <p><b>pH:</b> No Data</p> <p><b>Freezing point:</b> No Data</p> <p><b>Evaporation rate:</b> No Data</p> <p><b>Explosive Limits:</b> No Data</p> <p><b>Vapor Density:</b> No Data</p> <p><b>Solubility:</b> No Data</p> <p><b>Boiling range:</b> No Data</p> <p><b>Autoignition temperature:</b> No Data</p> <p><b>Viscosity:</b> N/A</p>	<p><b>Odor:</b> Faint odor</p> <p><b>Odor threshold:</b> No Data</p> <p><b>Melting point:</b> No Data</p> <p><b>Flash point:</b> 93 F, 34 C</p> <p><b>Flammability:</b> No Data</p> <p><b>Vapor pressure:</b> No Data</p> <p><b>Specific Gravity:</b> 0.938</p> <p><b>Partition coefficient (n-octanol/water):</b> No Data</p> <p><b>% Weight Volatile (VOC):</b> 99.00</p> <p><b>Decomposition temperature:</b> No Data</p>
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## Section 10. Stability and Reactivity

**Chemical Stability:** Stable at room temperature. No specific test data related to reactivity is available for this product or its ingredients.

**Hazardous reactions:** None known. Stable under normal conditions.

## Section 11. Toxicological Information

Oral Toxicity LD50: 4,724mg/kg

Inhalation Toxicity LC50: 5mg/L

### Component Toxicity

107-98-2 Propylene glycol monomethyl ether

Oral LD50: 5,000 mg/kg (Rat) Dermal LD50: 13 g/kg (Rabbit) Inhalation LC50: 6.01 mg/L (Rat)

872-50-4 1-Methyl-2-pyrrolidone

Oral LD50: 3,598 mg/kg (Rat) Dermal LD50: 8 g/kg (Rabbit) Inhalation LC50: 3.10 mg/L (Rat)

### Routes of Entry

Inhalation

Skin Contact

Eye Contact

Ingestion

## Target Organs

Eyes      Central Nervous System      Reproductive System      Skin

## Effects of Overexposure

## Carcinogenicity

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			No Data

## Section 12. Ecological Information

Only component information is listed, if any. No testing has been performed on this mixture as it relates to ecological impact.

### Component Ecotoxicity

Propylene glycol monomethyl ether	96 Hr LC50 Pimephales promelas: 20.8 g/L [static]; 48 Hr EC50 Daphnia magna: 23300 mg/L
1-Methyl-2-pyrrolidone	LD50 Colinus virginianus: 2212 mg/kg; 72 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 96 Hr LC50 Lepomis macrochirus: 832 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1072 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 1400 mg/L [static]; 48 Hr EC50 Daphnia magna: 4897 mg/L

## Section 13. Disposal Considerations

The generation of waste should be avoided or minimized by using excess product in an alternate, beneficial application wherever possible.

Empty containers may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

## Section 14. Transport Information

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Flammable Liquid, n.o.s. "1-Methoxy-2-propanol"	1993	III	3
IATA	Flammable Liquid, n.o.s. "1-Methoxy-2-propanol"	1993	III	3
IMDG	Flammable Liquid, n.o.s. "1-Methoxy-2-propanol"	1993	III	3

## Section 15. Regulatory Information

**State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING!**

This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

872-50-4 1-Methyl-2-pyrrolidone 10 to 20 % Developmental



**WHMIS Symbol(s)**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30, unless listed below:

- None

This product contains the following substance(s), which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372:

872-50-4    1-Methyl-2-pyrrolidone    10 - 20%

**Section 16. Other Information**

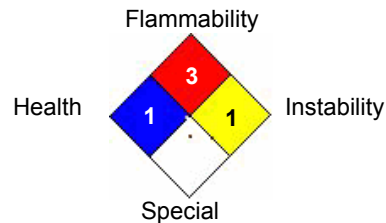
**The customer is responsible for determining the proper PPE code for this material within their respective process.**

**Hazardous Material Information System (HMIS)**

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X

**HMIS & NFPA Hazard Rating Legend**  
 \* = Chronic Health Hazard  
 0 = INSIGNIFICANT  
 1 = SLIGHT  
 2 = MODERATE  
 3 = HIGH

**National Fire Protection Association (NFPA)**



Date Prepared: 10/1/2015  
Date revised: 2015-10-01

Reviewer Revision 3

**Notice to reader:**

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PUPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.