

SAFETY DATA SHEET



Section 1. Identification

Product Name: Bridge Deck Concrete Primer (A-Side)

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°F) |
| Inhalation Toxicity | Acute Tox. 4 | Gases >2500 and ≤ 5000 ppm, Vapors >10 and ≤ 20 mg/l, Dusts & mists >1 and ≤ 5 mg/l |
| Skin corrosive | 2 | Reversible adverse effects in dermal tissue, Draize score: ≥ 2.3 < 4.0 or persistent inflammation |
| Eye corrosive | 2A | Eye irritant: Subcategory 2A, Reversible in 21 days |
| Respiratory sensitizer | 1 | Respiratory sensitizer |
| Skin sensitizer | 1 | Skin sensitizer |
| Mutagen | 1B | Known to produce heritable mutations in human germ cells Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity |
| Carcinogen | 1B | Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity |
| Organ toxin single exposure | 3 | Transient target organ effects- Narcotic effects- Respiratory tract irritation |
| Organ toxin repeated exposure | 2 | Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases |
| Aspiration hazard | 1 | Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ≥ 20.5 mm ² /s at 40° C. |

GHS Hazards

| | |
|------|--|
| H226 | Flammable liquid and vapour |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |

GHS Precautions

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| P201 | Obtain special instructions before use |
| P202 | Do not handle until all safety precautions have been read and understood |

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| H317 | May cause an allergic skin reaction | P210 | Keep away from heat/sparks/open flames/hot surfaces – No smoking |
| H319 | Causes serious eye irritation | P233 | Keep container tightly closed |
| H332 | Harmful if inhaled | P240 | Ground/bond container and receiving equipment |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled | P241 | Use explosion-proof electrical/ventilating/light/.../equipment |
| H335 | May cause respiratory irritation | P242 | Use only non-sparking tools |
| H340 | May cause genetic defects | P243 | Take precautionary measures against static discharge |
| H350 | May cause cancer | P260 | Do not breathe dust/fume/gas/mist/vapours/spray |
| H373 | May cause damage to organs through prolonged or repeated exposure | P261 | Avoid breathing dust/fume/gas/mist/vapours/spray |
| | | P264 | Wash exposed skin thoroughly after handling |
| | | P271 | Use only outdoors or in a well-ventilated area |
| | | 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 |
| | | P285 | In case of inadequate ventilation wear respiratory protection |
| | | P312 | Call a POISON CENTER or doctor/physician if you feel unwell |
| | | P314 | Get Medical advice/attention if you feel unwell |
| | | P321 | Specific treatment (as detailed on this label) |
| | | P331 | Do NOT induce vomiting |
| | | P362 | Take off contaminated clothing and wash before reuse |
| | | P363 | Wash contaminated clothing before reuse |
| | | P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician |
| | | 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 |
| | | P304+P341 | IF INHALED: If breathing is difficult, 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 |

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| P332+P313 | If skin irritation occurs: Get medical advice/attention |
| P333+P313 | If skin irritation or a rash occurs: Get medical advice/attention |
| P337+P313 | Get medical advice/attention |
| P342+P311 | Call a POISON CENTER or doctor/physician |
| 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 |
|---|---|--|-----------------------|
| Solvent naphtha, petroleum, light aromatic 64742-95-6 30 to 40% | OELs not established | OELs not established | |
| Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- 5873-54-1 30 to 40% | OELs not established | OELs not established | |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 20 to 30% | PELs - 0.02 ppm Ceiling PELs - 0.2 mg/m3 Ceiling | TLV - 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI)) | |
| Benzene, 1,1'-methylenebis [2-isocyanato- 2536-05-2 1 to 5% | OELs not established | OELs not established | |

Section 4. First-aid Measures

Move exposed person to fresh air. Get medical attention immediately. Treatment is symptomatic for primary irritation or bronchospasm. 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. A poly-glycol based skin cleanser or corn

oil may be more effective than soap and water. Get medical attention if symptoms occur. 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: Foam, CO₂ or dry powder. (**Note:** Water may be used if no other available media is available **AND** used in copious quantities. Reaction between water and hot material may be vigorous. Prevent washings from entering water courses, keep fire exposed containers cool by spraying with water.)

Caution:

Due to reaction with water producing CO₂ gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if overheated.

Hazardous decomposition products:

Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN.

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.

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. 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 in eyes or on skin or clothing.

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.

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 reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed only after placing under a nitrogen blanket. Do not store in unlabeled containers.

Use appropriate containment to avoid environmental contamination.

Unsuitable containers: Do not store in containers made of 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 |
|--|---|--|-----------------------|
| Solvent naphtha, petroleum, light aromatic 64742-95-6 | OELs not established | OELs not established | |
| Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]- 5873-54-1 | OELs not established | OELs not established | |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | PELs - 0.02 ppm Ceiling PELs - 0.2 mg/m3 Ceiling | TLV - 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI)) | |
| Benzene, 1,1'-methylenebis [2-isocyanato- 2536-05-2 | OELs not established | OELs not established | |

Engineering Controls: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Smell is not an adequate indicator of hazard.

Medical supervision of all employees who handle or come in contact with respiratory sensitizers is recommended. Personnel with a history of asthma-type conditions, bronchitis or skin sensitization conditions should not work with this material.

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 complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

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

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| <p>Appearance: Pale yellow to amber</p> <p>Vapor Pressure: No Data</p> <p>pH: No Data</p> <p>Freezing point: No Data</p> <p>Evaporation rate: No Data</p> <p>Explosive Limits: No Data</p> <p>Vapor Density: No Data</p> <p>Solubility: No Data</p> <p>Boiling range: No Data</p> <p>Decomposition temperature: No Data</p> <p>% Weight Volatile (VOC) 37.63</p> | <p>Odor: Faint odor</p> <p>Odor threshold: No Data</p> <p>Melting point: No Data</p> <p>Flash point: 129 F, 54 C</p> <p>Flammability: No Data</p> <p>Vapor pressure: No Data</p> <p>Specific Gravity 1.054</p> <p>Partition coefficient (n- octanol/water): No Data</p> <p>Autoignition temperature: No Data</p> <p>Viscosity: N/A</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: Reaction with water (moisture) produces CO₂ gas. An exothermic reaction with materials containing active hydrogen groups can occur. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. This material is insoluble with, and heavier than, water and sinks to the bottom, but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide. The material will react with water, alcohols, amines, bases and acids.

Section 11. Toxicological Information

Inhalation Toxicity LC50: 2mg/L

Routes of Entry

Inhalation Skin Contact Eye Contact Ingestion

Target Organs

Eyes Lungs Skin Respiratory System

Effects of Overexposure

NO DATA

Carcinogenicity

| <u>CAS Number</u> | <u>Description</u> | <u>% Weight</u> | <u>Carcinogen Rating</u> |
|-------------------|--|-----------------|--|
| 101-68-8 | 4,4'-Methylenediphenyl diisocyanate | 20 to 30% | 4,4'-Methylenediphenyl diisocyanate: |
| 2536-05-2 | Benzene, 1,1'-methylenebis[2-isocyanato- | 1 to 5% | Benzene, 1,1'-methylenebis[2-isocyanato- |

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

Solvent naphtha, petroleum, light aromatic LD50 *Colinus virginianus*: >2250 mg/kg. 5 Days LC50 *Colinus virginianus*: >6500 ppm [Diet]. 96 Hr LC50 *Oncorhynchus mykiss*: 9.22 mg/L. 48 Hr EC50 *Daphnia magna*: 6.14 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 | COMBUSTIBLE LIQUID, n.o.s. "SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC" Reclassified in accordance with CFR 49 173.150(f) | NA1993 | III | Comb Liquid |
| IATA | FLAMMABLE LIQUID, n.o.s. "SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC" | UN1993 | III | 3 |
| IMDG | FLAMMABLE LIQUID, n.o.s. "SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC" | UN1993 | 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:

- None



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:

101-68-8 4,4'-Methylenediphenyl diisocyanate 20 - 30%

Section 16. Other Information

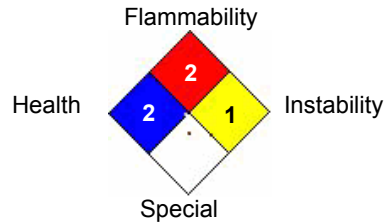
The customer is responsible for determining the proper PPE code for this material within their respective process.

Hazardous Material Information System (HMIS)

| | | |
|---------------------|---|---|
| HEALTH | * | 2 |
| FLAMMABILITY | | 2 |
| 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)



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Reviewer Revision 5

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.