

# Material Safety Data Sheet



## EV Protective Sealant for Pavers and Slabs

### 1. Product and company identification

<b>Product name</b>	: EV Protective Scelant for Pavers and Slabs
<b>Material uses</b>	: Use to protect pavers and slabs made of concrete or natural stone.
<b>Supplier/Manufacturer</b>	: Techniseal 300, avenue Liberté Candiac, QC, Canada, J5R 6X1 Tel: (514) 523-2110 Toll free: 1-800-465-7325 Fax: (450) 633-3035
<b>Validation date</b>	: 08/30/2008
<b>Responsible name</b>	: Atrion Regulatory Services, Inc.
<b>In case of emergency</b>	: CANUTEC (613) 996-6666

### 2. Hazards identification

<b>Physical state</b>	: Liquid.
<b>Odor</b>	: Soap.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Emergency overview</b>	: DANGER!  MAY BE FATAL IF INHALED. HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.  Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
<b>Potential acute health effects</b>	
<b>Inhalation</b>	: May be fatal if inhaled. Irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Ingestion</b>	: Harmful if swallowed.
<b>Skin</b>	: Harmful in contact with skin. Irritating to skin.
<b>Eyes</b>	: Severely irritating to eyes. Risk of serious damage to eyes.
<b>Potential chronic health effects</b>	
<b>Chronic effects</b>	: Contains material that can cause target organ damage.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.
<b>Target organs</b>	: Contains material which causes damage to the following organs: blood, kidneys, liver, lymphatic system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
<b>Over-exposure signs/symptoms</b>	
<b>Inhalation</b>	: Adverse symptoms may include the following: respiratory tract irritation coughing

## 2. Hazards identification

- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
irritation  
redness
- Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

## 3. Composition/information on ingredients

### United States

Name	CAS number	%
2-Butoxyethanol	111-76-2	1 - 5
N-Methyl-2-pyrrolidone	872-50-4	1 - 5

### Canada

Name	CAS number	%
2-Butoxyethanol	111-76-2	1 - 5
N-Methyl-2-pyrrolidone	872-50-4	1 - 5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## 5 . Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides
- 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.

## 6 . Accidental release measures

- Personal precautions** : 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : 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).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
  - Large spill** : 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.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. 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 can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool 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.

## 8 . Exposure controls/personal protection

### United States

**Product name**

2-Butoxyethanol

**Exposure limits**

**ACGIH TLV (United States, 1/2008).**

TWA: 20 ppm 8 hour(s).

**NIOSH REL (United States, 12/2001). Skin**

TWA: 24 mg/m<sup>3</sup> 10 hour(s).

TWA: 5 ppm 10 hour(s).

**OSHA PEL (United States, 11/2006). Skin**

TWA: 240 mg/m<sup>3</sup> 8 hour(s).

TWA: 50 ppm 8 hour(s).

N-Methyl-2-pyrrolidone

**AIHA WEEL (United States, 1/2008). Skin**

TWA: 10 ppm 8 hour(s).

### Canada

**Product name**

2-Butoxyethanol

**Exposure limits**

**CA Alberta Provincial (Canada, 10/2006). Skin**

8 hrs OEL: 97 mg/m<sup>3</sup> 8 hour(s).

8 hrs OEL: 20 ppm 8 hour(s).

**CA British Columbia Provincial (Canada, 7/2007).**

TWA: 20 ppm 8 hour(s).

**CA Ontario Provincial (Canada, 3/2007). Skin**

TWAEV: 20 ppm 8 hour(s).

**CA Quebec Provincial (Canada, 12/2006).**

TWAEV: 20 ppm 8 hour(s).

TWAEV: 97 mg/m<sup>3</sup> 8 hour(s).

N-Methyl-2-pyrrolidone

**CA Ontario Provincial (Canada, 3/2007).**

TWAEV: 400 mg/m<sup>3</sup> 8 hour(s).

**Consult local authorities for acceptable exposure limits.**

**Recommended monitoring procedures**

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protection**

**Eyes**

: Splash goggles.

**Skin**

: Synthetic apron.

**Respiratory**

: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

**Hands**

: Chemical resistant gloves.

**Personal protective equipment (Pictograms)**



## 8 . Exposure controls/personal protection

- HMIS Code/Personal protective equipment** : J
- Environmental exposure controls** : 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.

## 9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: >100°C (>212°F) [Pensky-Martens.]
- Color** : Milky.
- Odor** : Soap.
- pH** : 7.8
- Boiling/condensation point** : 100°C (212°F)
- Melting/freezing point** : -3°C (26.6°F)
- Specific gravity** : 1.023
- VOC** : 33.98 (g/l).
- Viscosity** : Dynamic: 6.5 mPa·s (6.5 cP)
- Solubility** : Not available.

## 10 . Stability and reactivity

- Stability** : The product is stable.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
2-Butoxyethanol	Rabbit	220 mg/kg	LD50 Dermal	-
	Rat	917 mg/kg	LD50 Oral	-
	Rat	470 mg/kg	LD50 Oral	-
N-Methyl-2-pyrrolidone	Rabbit	8 g/kg	LD50 Dermal	-
	Rat	3914 mg/kg	LD50 Oral	-

**Inhalation** : May be fatal if inhaled. Irritating to respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** : Harmful if swallowed.

**Skin** : Harmful in contact with skin. Irritating to skin.

**Eyes** : Severely irritating to eyes. Risk of serious damage to eyes.

### Carcinogenicity

#### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
2-Butoxyethanol	A3	3	-	-	-	-

## 12 . Ecological information

**Environmental effects** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

#### Product/ingredient name

2-Butoxyethanol

#### Species

Fish  
Fish  
Crustaceans

#### Exposure

96 hours  
96 hours  
48 hours

#### Result

Acute LC50 1490000 ug/L  
Acute LC50 1250000 ug/L  
Acute LC50 800000 to 1000000 ug/L

## 13 . Disposal considerations

### Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners 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 and runoff and contact with soil, waterways, drains and sewers.

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

### Regulatory information

**DOT/ TDG / IMDG/ IATA** : Not regulated.

## 15 . Regulatory information

### United States

#### HCS Classification

: Highly toxic material  
Irritating material  
Target organ effects

#### U.S. Federal regulations

: **United States inventory (TSCA 8b)**: All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances**: No products were found.  
**SARA 302/304 emergency planning and notification**: No products were found.  
**SARA 302/304/311/312 hazardous chemicals**: 2-Butoxyethanol; N-Methyl-2-pyrrolidone  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification** 2-Butoxyethanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; N-Methyl-2-pyrrolidone: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard  
**Clean Water Act (CWA) 307**: No products were found.  
**Clean Water Act (CWA) 311**: Triethylamine; Ammonium hydroxide  
**Clean Air Act (CAA) 112 accidental release prevention** No products were found.  
**Clean Air Act (CAA) 112 regulated flammable substances** No products were found.  
**Clean Air Act (CAA) 112 regulated toxic substances** No products were found.

### SARA 313

	Product name	CAS number	Concentration
<b>Form R - Reporting requirements</b>	2-Butoxyethanol	111-76-2	5 - 10
	N-Methyl-2-pyrrolidone	872-50-4	5 - 10
<b>Supplier notification</b>	2-Butoxyethanol	111-76-2	5 - 10
	N-Methyl-2-pyrrolidone	872-50-4	5 - 10

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.



## 15 . Regulatory information

- State regulations**
- Connecticut Carcinogen Reporting:** None of the components are listed.
  - Connecticut Hazardous Material Survey:** None of the components are listed.
  - Florida substances:** None of the components are listed.
  - Illinois Chemical Safety Act** None of the components are listed.
  - Illinois Toxic Substances Disclosure to Employee Act** None of the components are listed.
  - Louisiana Reporting:** None of the components are listed.
  - Louisiana Spill:** None of the components are listed.
  - Massachusetts Spill:** None of the components are listed.
  - Massachusetts Substances:** The following components are listed: 2-Butoxyethanol;N-Methyl-2-pyrrolidone
  - Michigan Critical Material:** None of the components are listed.
  - Minnesota Hazardous Substances:** None of the components are listed.
  - New Jersey Hazardous Substances:** The following components are listed: 2-Butoxyethanol
  - New Jersey Spill:** None of the components are listed.
  - New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.
  - New York Acutely Hazardous Substances:** None of the components are listed.
  - New York Toxic Chemical Release Reporting:** None of the components are listed.
  - Pennsylvania RTK Hazardous Substances:** The following components are listed: 2-Butoxyethanol;N-Methyl-2-pyrrolidone
  - Rhode Island Hazardous Substances:** None of the components are listed.

- California Prop. 65** : **WARNING:** This product contains a chemical or chemicals known to the state of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
N-Methyl-2-pyrrolidone	No.	Yes.	No.	3200 µg/day (inhalation)

- Canada**
- WHMIS (Canada)** : Class D-1A: Material causing immediate and serious toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).



- Canadian lists**
- CEPA Toxic substances:** None of the components are listed.
  - Canadian ARET:** None of the components are listed.
  - Canadian NPRI:** The following components are listed: 2-Butoxyethanol;N-Methyl-2-pyrrolidone
  - Alberta Designated Substances:** None of the components are listed.
  - Ontario Designated Substances:** None of the components are listed.
  - Quebec Designated Substances:** None of the components are listed.

- Canada inventory** : All components are listed or exempted.

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**

**International regulations**

- International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

**16 . Other information**

**Label requirements** : MAY BE FATAL IF INHALED. HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

**Hazardous Material Information System (U.S.A.)** :

Health	*	2
Fire hazard		1
Physical Hazard		0
Personal protection		J

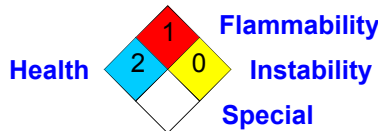
**HAZARD RATINGS**

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)** :



**References** : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

**Date of issue** : 08/30/2008  
**Version** : 1

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.