



MATERIAL SAFETY DATA SHEET

Prepared in accordance with OSHA1910.1200 and ANSI Z400.1 and Canadian WHMIS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **Dirt and Grease Cleaner for Pavers and Slabs**

MANUFACTURER: **Techni-Seal Inc.**
 ADDRESS: 1470, De Coulomb
 Boucherville (Quebec)
 Canada J4B 7K2

Phone: 1-800-465-7325 (North America) 514-523-8324 (International)
 Emergency Phone: CANUTEC (613) 996-6666
 Website: www.techniseal.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Conc in %
2-Butoxyethanol	111-76-2	10-20
Alkylphenol Ethoxylate	9016-45-9	1-5
Sodium Metasilicate	6834-92-0	1-5
Sodium Xylene Sulfonate	1300-72-7	1-5
Trisodium Phosphate Dodecahydrate	10101-89-0	1-5
Water	7732-18-5	60-80

See Section 8 for Exposure Limits

3. HAZARDS IDENTIFICATION

Green liquid with a pine odor.

EMERGENCY OVERVIEW

Warning! Eye and skin irritant. Inhalation of vapors may cause irritation of the nose, throat and respiratory tract, headache, dizziness and drowsiness. May be harmful if swallowed or absorbed through the skin. Prolonged overexposure may cause liver, kidney and blood damage.

See Section 11 for detailed information

4. FIRST AID MEASURES

INGESTION: If conscious, rinse mouth with a small amount of water and give 1 eight ounce glass of water to drink. Seek immediate medical attention. Never give anything by mouth to a person who is unconscious or drowsy.

SKIN CONTACT: Remove contaminated clothing and wash immediately with plenty of soap and water. Get medical attention if irritation or other symptoms develop. Launder contaminated clothing before reuse.

EYE CONTACT: Rinse immediately with plenty of water for at least 15 minutes, while lifting the eyelids. Get immediate medical attention.

INHALATION: Remove affected person from source of exposure. If symptoms of exposure persist, get medical attention. If breathing is difficult, have qualified person administer oxygen. If breathing has stopped, administer artificial respiration and get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: >212°F (100°C)

AUTOIGNITION TEMPERATURE: Not available

FLAMMABLE LIMITS IN AIR (% BY VOL.) LOWER: 1.1% (2-butoxyethanol)
UPPER: 12.7% (2-butoxyethanol)

BASIC FIREFIGHTING PROCEDURES: This product is not combustible. Use any media that is appropriate for the surrounding fire. Firefighters should always wear positive pressure self-contained breathing apparatus and protective clothing when fighting fires involving chemicals. Cool fire exposed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide carbon dioxide, sulfur oxides, phosphorus oxides and various organic compounds.

6. ACCIDENTAL RELEASE MEASURES

Spill: Ventilate area. Wear appropriate protective clothing to avoid eye and skin contact including impervious glove, safety goggles and respirator if needed. Contain and collect using an inert absorbent. Place into an appropriate container for disposal. Dike large spills and collect into appropriate containers. Prevent spill from entering waterways or sewers. Report spills and releases as required to appropriate authorities.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing vapors. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wear appropriate protective clothing and equipment handling this material. Wash thoroughly after handling. Do not eat, drink or smoke in the work area.

STORAGE: Store in cool, dry, well-ventilated area. Keep containers closed. Keep away from incompatible materials (see Section 10). Store above 60°F (16°C)

EMPTY CONTAINERS: Empty containers may contain product residue and may be dangerous. Do not cut, weld, drill, etc. on or near containers, even empty containers, as fire or explosion may occur. Follow all MSDS precautions in handling empty containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

EXPOSURE LIMITS

Chemical Name	Exposure Limits
2-Butoxyethanol	20 ppm ACGIH TLV-TWA 50 ppm OSHA PEL-TWA skin
Alkylphenol Ethoxylate	None Established
Sodium Metasilicate	None Established
Sodium Xylene Sulfonate	None Established
Trisodium Phosphate Dodecahydrate	None Established

ENGINEERING CONTROLS: Use with adequate general or local exhaust ventilation to maintain exposures below applicable occupational exposure limits.

EYE PROTECTION: Safety glasses or goggles recommended.

SKIN PROTECTION: Avoid skin contact. Wear impervious gloves if needed to avoid contact.

RESPIRATORY PROTECTION: If needed, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2, CSA Standard Z94.4-02 and good Industrial Hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: Not available

SPECIFIC GRAVITY: 1.054 g/cm³

FREEZING POINT: <-2°C (28°F)

% VOLATILE: 70-90%

VAPOR PRESSURE: 0.8 mmHg @ 20°C

EVAPORATION RATE (BUTYL ACETATE = 1): <1

VAPOR DENSITY (AIR = 1): >1

SOLUBILITY IN WATER: Soluble

OCTANOL/WATER PARTITION COEFFICIENT: Not determined

pH: 12.86 (alkaline reserve 1.043)

VOC: Not available

APPEARANCE/ODOR: Green liquid with a pine odor.

10. STABILITY AND REACTIVITY DATA

STABILITY: Stable under normal conditions of use and storage.

INCOMPATIBILITY: Strong mineral acids, strong oxidizing agents.

CONDITIONS TO AVOID: Avoid excessive heat and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide carbon dioxide, sulfur oxides, phosphorus oxides and various organic compounds.

11. TOXICOLOGICAL INFORMATION

PRODUCT HEALTH HAZARD INFORMATION

SKIN: May cause moderate to severe irritation. Repeated contact may cause dermatitis. May be harmful if absorbed through the skin.

EYE: May cause severe irritation. Corneal injury is possible.

INHALATION: May cause irritation of the nose, throat and upper respiratory tract. Overexposure may cause headache, dizziness and drowsiness.

INGESTION: May cause irritation of the mouth and gastrointestinal tract with abdominal pain, nausea and vomiting and nervous system effects.

CHRONIC HEATH EFFECTS: Chronic overexposure to 2-butoxyethanol may cause damage to liver, kidney and blood based on studies with laboratory animals. None of the components of this product present at 0.1% or greater are listed as carcinogens or suspected carcinogens by IARC, NTP or OSHA.

ACUTE TOXICITY VALUES

2-Butoxyethanol: LD50 oral rat 470 mg/kg. LC50 inhalation rat 450 ppm/4 hr, LD50 dermal rabbit 220 mg/kg.

Alkylphenol Ethoxylate: LD50 oral rat 3310 mg/kg, LD50 skin rabbit >2000 mg/kg

Sodium Metasilicate: LD50 oral rat 1153 mg/kg

Sodium Xylene Sulfonate: LD50 oral rat 4000 mg/kg

Trisodium Phosphate Dodecahydrate: LD50 oral rat 7400 mg/kg

12. ECOLOGICAL INFORMATION

The ecological effects of this product have not been determined.

13. DISPOSAL CONSIDERATIONS

This product, as sold, meets the RCRA criteria for corrosivity (D002). Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not Regulated

DOT HAZARD CLASS: N/A

UN NUMBER: N/A

DOT LABELS REQUIRED: None

HAZARD SUBSTANCE: Sodium phosphate, tribasic

REPORTABLE QUANTITY: 100,000 lbs

CANADIAN TDG PROPER SHIPPING NAME: Not regulated

TDG HAZARD CLASS: N/A

UN NUMBER: N/A

TDG LABELS REQUIRED: None

IATA/IMDG PROPER SHIPPING NAME: Not regulated

IMDG HAZARD CLASS: N/A

UN NUMBER: N/A

LABELS REQUIRED: None

15. REGULATORY INFORMATION

SARA TITLE III INFORMATION:

Section 311/312 (40 CFR 370) **Hazard Categories:** Acute Health, Chronic Health

Section 313 (40 CFR 372): This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirement:

2-Butoxyethanol (glycol ether)	111-76-2	1-5%
--------------------------------	----------	------

Section 302 (40 CFR 355): This product does not contain chemicals listed as extremely hazardous chemicals under SUPERFUND Amendments and Reauthorization Act (SARA).

CERCLA 103 Reportable Quantity: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Sodium phosphate, tribasic (5% maximum) of 5000 lbs, is 100,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA: All of the components of this product are listed on the EPA TSCA Inventory.

California Proposition 65: This product contains the following chemicals known to the State of California to cause cancer, birth defects or other reproductive harm: Ethylene oxide, trace amount (cancer, female reproductive toxicity)

Canadian WHMIS Classification: Class D, Division 2, Subdivision B (Toxic Material causing other Chronic Effects)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

NFPA Rating: Health: 1 Fire: 0 Reactivity: 0
HMIS Rating: Health: 2 Fire: 0 Reactivity: 0

REVISION DATE: 06/01/05

REPLACES SHEET DATED: 3/12/02

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information. It is the responsibility of the user to determine the applicability of this information for his use.