

# E16

elements™



environmentally responsible  
maintenance solutions



## Bio Gel Graffiti Remover

*Removedor de Grafiti de Gel de Bio*

Formulated using bio based solvents that are safe alternatives to highly flammable, toxic or petroleum hydrocarbon solvents, or corrosive chemicals. This product is a ready to use, non-toxic, VOC compliant, biodegradable product specifically designed to remove the most difficult marks and stains from many surfaces. This soy and corn bio-based graffiti remover is formulated using a gel technology that allows the product to cling to vertical surfaces to enhance performance and minimize water run off. Can be used on all types of metals, glass, cement, concrete, porcelain, stone, tile, desk tops and most baked on enamel surfaces.

### ENVIRONMENTALLY RESPONSIBLE COMPARISON

Traditional Products	elements
Chlorinated solvents (i.e. methylene chloride tetrachloroethylene)	Ethyl lactate
Nonylphenol ethoxylates	Linear Alcohol Ethoxylate*
2-Butoxyethanol, Ethylene glycol monobutyl ether	Propylene glycol phenol ether
n-Methylpyrrolidone (NMP)	Methyl soyate
Aromatic solvents (i.e. toluene, xylene, ethyl benzene)	None
Benzyl alcohol	None
Acetone	None
Potassium hydroxide	None
Traditional Compound Descriptions:	elements Compound Descriptions:
<p><b>Chlorinated solvents</b> – strong nonflammable solvents. However, California Prop 65 listed as chemical known to cause cancer.</p> <p><b>Nonylphenol ethoxylates</b> – a non-ionic surfactant that is used to provide wetting and detergency. However, it is derived from a petroleum-based product. It has a suspected harmful biodegradable intermediate.</p> <p><b>2-Butoxyethanol</b> – effective water-soluble solvent to attack both water-soluble and water-insoluble inks and paints. However, it is a potential nose and eye irritant and may cause blood cell, liver or kidney damage if absorbed through skin.</p> <p><b>n-Methylpyrrolidone</b> – strong solvent. However, California Prop 65 listed as chemical known to cause reproductive toxicity.</p> <p><b>Aromatic solvents</b> – flammable solvents. However, considered of high concern of chronic toxicity to fish by EPA PBT Profiler. Toluene is California Prop 65 listed as a chemical known to cause reproductive toxicity. Ethylbenzene is California Prop 65 listed as a chemical known to cause cancer.</p> <p><b>Benzyl alcohol</b> – respiratory, eye and skin irritant earning a "do not use" recommendation on the Janitorial Products Pollution Prevention list.</p> <p><b>Acetone</b> – strong solvent. However highly flammable, dangerous to use.</p> <p><b>Potassium hydroxide</b> – corrosive to skin and eyes. Should not be freely released into the environment.</p> <p>The U.S. Environmental Protection Agency (EPA) Persistent Bioaccumulative Toxin (PBT) Profiler – ecological and human health hazard screening tool.</p>	<p><b>Linear Alcohol Ethoxylate*</b> - listed as Positive Environmental Profile surfactant on EPA design for the Environment Formulator Initiative. A non-ionic surfactant made from linear primary alcohol that biodegrades readily to compounds with low toxicity.</p> <p><b>Ethyl lactate</b> – biobased, low toxicity, readily biodegradable.</p> <p><b>Methyl Soyate</b> - biobased, low toxicity, readily biodegradable.</p> <p><b>Propylene glycol phenol ether</b> – low toxicity, readily biodegradable.</p>

### PRODUCT SPECIFICATIONS

Color:	Amber	Flash Point (TCC):	127° F
Odor:	Characteristic odor	Storage/Stability:	1 year
pH:	N/A	VOC Content (w/w)	< 30%
Viscosity:	Semi-gel	Weight Per Gallon:	8.18 lbs./gal.
Biodegradability:	Complete	Freeze/Thaw Stability:	Keep from freezing

## SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

<b>Manufacturer's Name:</b> Misco Products Corporation	<b>Product Name:</b> Graffiti Remover	<b>Supplier's Name:</b>
<b>Manufacturer's Address:</b> 1048 Stinson Drive Reading, PA 19605	<b>Generic Name:</b> Graffiti Remover	<b>Supplier's Address:</b>
<b>Manufacturer's Phone #:</b> (610) 926-4106	<b>Chemical Family:</b> Solvent/Detergent Blend	<b>Supplier's Phone #:</b>
	<b>Formula:</b> Proprietary	

## SECTION 2-HAZARDOUS INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Propylene Glycol phenyl Ether	770-35-4	5 to 10			
Ethyl Lactate	687-47-8	20 to 30			
Mixed Alcohol Ethoxylates	68439-46-3	5 to 10			

Other ingredients in this product are considered non-Hazardous according to OSHA 29.CFR 1910.1200

## SECTION 3-PHYSICAL DATA

**Boiling Point (°F):** 310+ F. Initial  
**Vapor Pressure:** 2mm Hg @ 68 F.  
**% Volatile:** 40+  
**Solubility in Water:** Nil  
**Physical Description:** Clear weak gel with characteristic odor.  
**VOC Content:** 30% by wt.

**Specific Gravity:** 0.950 – 1.000  
**Vapor Density (Air=1):** N/A  
**pH:** N/A  
**Evaporation Rate (Water=1):** <1

## SECTION 4-FIRE AND EXPLOSION HAZARD DATA

**Flash Point (Method Used):** 127° F. (TCC)  
**Upper Explosion Limit:** N/A  
**Lower Explosion Limit:** N/A  
**Extinguishing Media:** Foam, CO<sub>2</sub>, dry chemical.  
**Special Firefighting Procedures:** Do Not Use Water. **Handle as oil fire.**  
**Unusual Fire and Explosion Hazards:** Drums heated by fire can explode.

## SECTION 5-REACTIVITY DATA

**Stability:** Stable  
**Hazards Decomposition Products:** Carbon monoxide possible if burned.

**Hazardous Polymerization:** None  
**Incompatibility (Materials to Avoid):** Strong oxidizers and acidic agents.

## SECTION 6-STORAGE AND HANDLING INFORMATION

WARNING: Eye irritant. May cause skin irritation with prolong or repeated contact. Combustible Liquid. Keep away from excessive heat, spark or open flames. Do not smoke while handling. Keep out of reach of children. For use by trained personnel only. Keep container closed during storage. For institutional and industrial use only. Avoid contact with eyes, skin and clothing. Wear rubber gloves and eye protection when handling. Avoid breathing of vapors. Use in well-ventilated area. Empty container may contain explosive or flammable vapors.

## SECTION 7-HEALTH HAZARDS AND FIRST AID

**Effects of Overexposure:**  
**Skin:** Prolonged or repeated contact may cause irritation, defatting, or dermatitis.  
**Eyes:** Eye irritant. May cause redness, swelling, or blurred vision.  
**Inhalation:** May be irritating to the nose, throat, and lungs. Large amounts can cause headache, nausea, dizziness, weakness, and fatigue.  
**Ingestion:** Can cause irritation of the gastrointestinal tract, nausea, vomiting, and diarrhea. Aspiration of material into the lungs can cause pneumonitis.

**First Aid Procedures:**

**Skin:** Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation persists.  
**Eyes:** Flush with large quantities of water, holding eyelids open. Seek medical attention.  
**Inhalation:** Get to fresh air. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.  
**Ingestion:** Do not induce vomiting. Seek medical attention immediately.

## SECTION 8-SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Use with adequate ventilation. Use NIOSH approved Hydrocarbon (Organic vapor) canister respirator when using in confined areas.  
**Ventilation Requirements:** Provide explosion-proof ventilation to keep TLV of Section 2 ingredients below acceptable limit.  
**Protective Gloves:** Solvent proof rubber or viton.  
**Eye Protection:** Chemical splash goggles or full-face shield.  
**Other Protective Equipment:** Eyewash station should be nearby. Protective chemical resistant outerwear when conditions exist where body contact is possible.

## SECTION 9-SPILL OR LEAK PROCEDURES

**Steps to be taken in Case Material is Released or Spilled:** Floors will become slippery. Avoid walking in product. Keep unessential personnel away. Mop up or otherwise absorb and hold disposal. Avoid discharge to sewer or open waterways.  
**Waste Disposal Method:** Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and containers should be treated as hazardous waste based on the characteristic of ignitability as defined under federal RCRA regulations (40 CFR 261) Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

## SECTION 10-REGULATORY INFORMATION

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

Yes - Fire Hazard  
No - Sudden Release of Pressure Hazard  
No - Reactivity Hazard  
Yes - Immediate (acute) Health Hazard  
No - Delayed (chronic) Health Hazard

**Shipping Information:**

FOR CONTAINERS > 1 Gallon : Cleaning Compound  
  
FOR 1 GALLON CONTAINERS : Cleaning Compound  
  
FOR CONTAINERS < 1 GALLON : Cleaning Compound

**HMIS Hazardous Materials Identification System**

<b>Health</b>	<b>2</b>
<b>Flammability</b>	<b>2</b>
<b>Reactivity</b>	<b>0</b>
<b>Personal Protection</b>	<b>C</b>

**FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION:** CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
	None	

This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.

CAS#	Chemical Name	Percent by Weight
	None	

## SECTION 11-OTHER INFORMATION

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product