

elements™



environmentally responsible
maintenance solutions



non ammoniated glass cleaner

An ultra concentrated Ammonia-free, non-streaking, non-smearing, quick drying product that cleans and shines glass, mirrors, sinks, countertops, stainless steel, and other washable surfaces. Can also be used as a light-duty cleaner on all surfaces not harmed by water.



This product meets Green Seal's environmental standard for industrial and institutional cleaners based on its reduced human and aquatic toxicity and reduced smog production potential.

ENVIRONMENTALLY RESPONSIBLE COMPARISON

Traditional Products	Elements
2-Butoxyethanol	None
Alcohol	None
Ammonium Hydroxide	None
	Acetic Acid
	Sodium Capryl Sulfonate
	Diethylene Glycol Butyl Ether
	Propylene Glycol Butyl Ether*
	VOC: None
pH 10 – 12	pH 4 – 5
Traditional Compound Descriptions:	Elements Compound Descriptions:
<p>2-Butoxyethanol – an effective water-soluble solvent to attack both water-soluble soils and water-insoluble oils and greases. However, it is a potential nose and eye irritant and may cause blood cell damage if absorbed through skin</p> <p>Alcohol – a water-soluble solvent widely used in glass and window cleaners and is not biodegradable. Highly flammable. It is irritating to skin, eyes and respiratory.</p> <p>Ammonium Hydroxide – a basic cleaning compound commonly used in window cleaners. However, it is extremely irritating to the respiratory tract and eyes.</p>	<p>Acetic Acid - Commonly know as vinegar. A mild acid that removes hard water scales. It is a naturally renewable resource and produced by fermentation of sugar cane and various grains.</p> <p>Sodium Capryl Sulfonate – a completely biodegradable surfactant provides wetting and detergency.</p> <p>Diethylene Glycol Butyl Ether - It is commonly used as a solvent in cleaners. It is biodegradable and is not easily absorbed through the skin.</p> <p>Propylene Glycol Butyl Ether* - listed as Positive Environmental Profile builder on EPA design for the Environment Formulator Initiative. It is commonly used as a solvent in cleaners. It is biodegradable and is not easily absorbed through the skin.</p>

PRODUCT SPECIFICATIONS

Dilution:	1:40	Viscosity:	Water thin
Color:	Blue	Foam:	Moderate
Odor:	Mild Odor	Storage/Stability:	1 year
pH (concentrate):	4.0 – 5.0	Weight Per Gallon:	8.41 lbs.
pH (ready-to-use):	4.0 – 5.0	Freeze/Thaw Stability:	Keep from freezing

SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

Manufacturer's Name: Misco Products Corporation	Product Name: Non-Ammoniated Glass Cleaner	Supplier's Name:
Manufacturer's Address: 1048 Stinson Drive Reading, PA 19605	Generic Name: Glass Cleaner	Supplier's Address:
Manufacturer's Phone #: (610) 926-4106	Chemical Family: Detergent blend	Supplier's Phone #:
	Formula: Proprietary	

SECTION 2-INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Acetic Acid	64-19-7	0 to 5			
Sodium Octanesulfonate	5324-84-5	0 to 5			
Diethylene Glycol Butyl Ether	112-34-5	20 to 30			
Propylene Glycol n-butyl Ether	5131-66-8	0 to 5			
Dye	Unknown	<0.05			

SECTION 3-PHYSICAL DATA

Boiling Point (°F): 212° F.	Specific Gravity: 1.010
Vapor Pressure: 20mm Hg @68°F.	Vapor Density (Air=1): >1
% Volatile: 80+	pH: 4.0 – 5.0
Solubility in Water: Complete	Evaporation Rate (Water=1): >1
Physical Description: Thin clear blue liquid with characteristic odor	
VOC Content: None	

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None
Upper Explosion Limit: N/A Lower Explosion Limit: N/A
Extinguishing Media: Dry chemical, CO ₂ or water
Special Firefighting Procedures: Keep fire exposed containers cool with water stream.
Unusual Fire and Explosion Hazards: N/A

SECTION 5-REACTIVITY DATA

Stability: Stable	Hazardous Polymerization: None
Hazards Decomposition Products: Not Known	Incompatibility (Materials to Avoid): Strong Alkalies, Chlorine

SECTION 6-STORAGE AND HANDLING INFORMATION

Slight eye irritant. May cause skin irritation with prolonged or repeated contact. 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. Avoid breathing of vapors or mists. Use in well-ventilated area.

SECTION 7-HEALTH HAZARDS AND FIRST AID

Effects of Overexposure:
Skin: May cause irritation with prolonged or repeated contact (dryness, redness)
Eyes: Mild eye irritant. May cause conjunctivitis, redness, swelling, tearing.
Inhalation: Mists may be irritating to mucous membranes in the nose, throat, and lungs.
Ingestion: Irritating to the mouth and throat. May cause headache, nausea, abdominal pain.
First Aid Procedures:
Skin: Flush with water. Seek medical attention if irritation persists.
Eyes: Flush with large quantities of water, holding eyelids open. Seek medical attention immediately.
Inhalation: Get to fresh air. Seek medical attention if irritation persists.
Ingestion: Do not induce vomiting. Drink large quantities of water. Seek medical attention immediately.

SECTION 8-SPECIAL PROTECTION INFORMATION

Respiratory Protection: No special requirements
Ventilation Requirements: No special requirements
Protective Gloves: Rubber gloves recommended
Eye Protection: Safety glasses recommended.
Other Protective Equipment: None

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. Ventilate area well. 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. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before offering for recycling.

SECTION 10-REGULATORY INFORMATION

SARA Title III - Section 311/312 -Hazard Categories:	Shipping Information:	HMIS Hazardous Materials Identification System
No - Fire Hazard	FOR CONTAINERS > 1 Gallon : Cleaning Compound	Health 1
No - Sudden Release of Pressure Hazard	Non-Hazardous	Flammability 0
No - Reactivity Hazard	FOR 1 GALLON CONTAINERS : Cleaning Compound	Reactivity 0
Yes - Immediate (acute) Health Hazard	Non-Hazardous	Personal Protection B
No - Delayed (chronic) Health Hazard	FOR CONTAINERS < 1 GALLON : Cleaning Compound	

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	None	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	None	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