

Puck Off

SECTION 1. IDENTIFICATION

Product Identifier	Puck Off
Product Family	Specialty Mark Remover
Manufacturer	Elemental, 11 Housers Lane, Woodstock, Ontario, N4S 7V9, 519.537.1095, http://www.elementalchem.com/
Emergency Phone No.	CANUTEC , 613-996-6666, 24 Hours
SDS No.	0231

SECTION 2. HAZARD IDENTIFICATION

Classification

Skin corrosion - Category 1A; Serious eye damage - Category 1

Label Elements



Danger

Causes severe skin burns and eye damage.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Monoethanolamine	141-43-5	5-15	
Diethylene glycol monobutyl ether	112-34-5	5-15	
Sodium Metasilicate	6834-92-0	1-5	
Potassium hydroxide	1310-58-3	1-5	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation or a rash occurs, get medical advice or attention.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. If eye irritation persists, get medical advice or attention.

Ingestion

Do not induce vomiting. Rinse mouth with water. If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

May cause moderate to severe irritation.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder or appropriate foam.

Specific Hazards Arising from the Product

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Dike spilled product to prevent runoff. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

General hygiene considerations: do not get in eyes, on skin or on clothing.

Conditions for Safe Storage

Separate from incompatible materials (see Section 10: Stability and Reactivity). Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL [C]	TWA	Ceiling
Sodium Metasilicate	10 mg/m ³			
Monoethanolamine	3 ppm	6 ppm	3 ppm	
Diethylene glycol monobutyl ether	10 ppm			

Appropriate Engineering Controls

General ventilation is usually adequate.

Individual Protection Measures

Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Not normally required if product is used as directed.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear yellow liquid.
Odour	Citrus
pH	13.0 - 13.6 (100% solution)
Flash Point	Not available
Evaporation Rate	Not available
Relative Density (water = 1)	1.054
Solubility	Soluble in all proportions in water

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive.

Chemical Stability

Normally stable.

Conditions to Avoid

Prolonged exposure to high temperatures. Contamination.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), strong acids (e.g. hydrochloric acid).
Copper alloys (e.g. brass and/or bronze), aluminum alloys.

Hazardous Decomposition Products

Corrosive, oxidizing nitrogen oxides; very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Sodium Metasilicate		1153 mg/kg	
Monoethanolamine	1210 mg/m ³ (mouse) (4-hour exposure) (aerosol)	1720 mg/kg (female rat)	1000 mg/kg (rabbit)
Diethylene glycol monobutyl ether		6560 mg/kg (rat)	2764 mg/kg (rabbit)
Potassium hydroxide		205 mg/kg (rat)	> 1260 mg/kg (rabbit)

Skin Corrosion/Irritation

May cause moderate or severe irritation based on information for closely related materials.

Serious Eye Damage/Irritation

Causes serious eye irritation based on skin irritation information.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Skin Absorption

May be harmful.

Ingestion

May cause Symptoms may include nausea, vomiting, stomach cramps and diarrhea.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

May cause an allergic reaction (skin sensitization) based on limited evidence.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Sodium Metasilicate	Not Listed	Not designated	Not Listed	Not Listed
Monoethanolamine	Not Listed	Not designated	Not Listed	Not Listed
Diethylene glycol monobutyl ether	Not Listed	Not designated	Not Listed	Not Listed
Potassium hydroxide	Not Listed	Not designated	Not Listed	Not Listed

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Germ Cell Mutagenicity

Not known to be a mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Algae
Sodium Metasilicate	210 mg/L (Brachydanio rerio (zebra fish); 96-hour; semi-static)		
Monoethanolamine	> 375 mg/L (Lepomis macrochirus (bluegill); 24 hr)	140 mg/L (Daphnia magna (water flea); 24 hr; static)	15 mg/L (Desmodesmus subspicatus (algae); 72-hour)
Diethylene glycol monobutyl ether	2400 mg/L (Lepomis macrochirus (bluegill); 24 hr; static)		
Potassium hydroxide	80 mg/L (Gambusia affinis (Mosquitofish); 96-hour)		

Persistence and Degradability

No ingredient of this product or its degradation products is known to be highly persistent.

Bioaccumulative Potential

This product and its degradation products are not expected to bioaccumulate.

Mobility in Soil

If released into the environment, this product is expected to move rapidly through the soil, based on physical and chemical properties.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

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SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1760	Monoethanolamine (Monoethanolamine)	8	III

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification



Class D2B



Class E

D2B - Toxic (Eye irritant); E - Corrosive

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

Part 5. (Diethylene glycol monobutyl ether)

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating **Health - 3** **Flammability - 0** **Instability - 0**

SDS Prepared By Elemental

Phone No. 519.537.1095

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Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. The information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.

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