



# SAFETY DATA SHEET

**POLYSI® Lubricants**  
**Remington MZL Bore Cleaner**

Issued 05/16/14  
Revision 3 7/30/19

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Remington MZL Bore Cleaner  
**Recommended Use:** Cleaner and Lubricant  
**Company:** PolySi® Technologies  
5108 Rex McLeod Drive  
Sanford, NC 27330, USA  
**Telephone:** 1-919-775-4989 (PolySi® Technologies)  
**Emergency Telephone:** 1-800-424-9300 (CHEMTREC, 24 hours, Washington, D.C. USA)

## 2. HAZARDS IDENTIFICATION

**Classification:** Flammable liquid GHS Category 2  
Skin Irritation GHS Category 3  
Eye Irritation GHS Category 2A  
Aspiration Hazard GHS Category 2  
Specific Target Organ Exposure, Single Exposure GHS Category 3

**Labeling:** Symbol:



Signal Word: Danger!

Hazard statements:  
H225 - Flammable liquid and vapor  
H302 - Harmful if swallowed  
H305 - May be harmful if swallowed and enters airways  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H336 - May cause dizziness and drowsiness  
H313 - May be harmful in contact with skin

### Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P303 + P361 + P353 - If on skin or hair: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

### Emergency Overview:

May cause central nervous system depression. Aspiration hazard. Can enter lungs and cause damage. Causes irritation to eyes and respiratory tract. Breathing vapors may cause drowsiness and dizziness. Prolonged or repeated contact with the skin may cause defatting with irritation redness and cracking. Flammable liquid and vapor. Isopropyl alcohol has been reported to be susceptible to autoxidation and therefore should be classified as peroxidizable. Hygroscopic. Target Organs: Central nervous system, respiratory system, eyes, and skin.



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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Chemical Identity:** 2-propanol, 15-40%  
**Common Name:** Isopropyl alcohol, rubbing alcohol, isopropanol  
**CAS Number:** 67-63-0  
**Impurities:** Less than 0.1%, not classifiable

**Chemical Identity:** Hydrogen peroxide, 3-7%  
**Common Name:** Hydrogen peroxide  
**CAS Number:** 7722-84-1  
**Impurities:** Less than 0.1%, not classifiable

### 4. FIRST AID MEASURES

**Eye Contact:** Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention. Obtain medical attention.

**Skin Contact:** Wash affected area with soap and water. If signs/symptoms persist, get medical attention. No need for first aid is anticipated.

**Inhalation:** If signs/symptoms develop, remove person to fresh air. If signs/symptoms persist, get medical attention.

**Ingestion:** If swallowed, do not induce vomiting. If irritation or discomfort occurs, obtain medical assistance.

### 5. FIRE FIGHTING MEASURES

**Autoignition Temperature:** >200°C  
**Flash point:** 24°C  
**Flammable Limits (LEL)** 2.0 vol% (Isopropanol)  
**Flammable Limits(UEL)** 12.7 vol% (Isopropanol)  
**Suitable Extinguishing Media:** On large fires used dry chemical, foam, or water spray. On small fires use carbon dioxide, dry chemical, or water spray. Water can be used to cool fire exposed containers.

**Unsuitable Extinguishing Media:** None.

**Specific hazards in case of fire:** Decomposes on heating and produces incompletely burned carbon compounds. Can release oxygen which may intensify a fire.

**Special protective equipment and precautions for fire fighters:**

Flammable liquid! Containers may generate oxygen gas under long periods of storage or more quickly when in contact with metals that decompose hydrogen peroxide. Temperature accelerates the decomposition of hydrogen peroxide. Move container from fire area, if possible. Avoid breathing vapors or dusts. Keep upwind. Use full firefighting gear (bunker gear). Any supplied-air respirator with full face piece and operated in a pressure-demand or other positive pressure mode in combination with a separate escape air supply. Use any self contained breathing apparatus with a full face piece.

Alert fire brigade and indicate hazard location. Wear breathing apparatus plus protective clothing. Cool fire exposed containers with water spray from a protected location. Do not approach containers suspected to be hot. If safe to do so, remove containers from path of fire.





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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** Use appropriate personal protection. (See section 8.)

**Environmental precautions:** For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

**Methods for material containment and cleaning up:** Observe precautions from other sections. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent. Seal the container.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** Avoid contact with skin, inhalation of mist, or ingestion. See section 8 for personal protection equipment. Practice good personal hygiene to prevent accidental ingestion after handling. Properly dispose of clothing that cannot be decontaminated.

**Conditions for safe storage, including any incompatibilities:** Avoid heat and contamination. Contamination can result in decomposition of hydrogen peroxide and the release of oxygen gas which could result in high pressure that could rupture a container. Contact with lead during use will generate oxygen gas and is an intended effect. Store product in a closed, vented, container located in a dry area. Handle with plastic, glass, or stainless steel. Other materials may cause decomposition. Do not store in open, inadequate, or mislabeled packaging. Check that containers are clearly labeled. Use metal cans, metal drums, plastic, or lined fiber containers. Keep away from heat and flame.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Control Parameters:** Under most handling conditions, this product will not generate mist or dust.

**Engineering Controls:** In most conditions, no special local ventilation is needed. General ventilation recommended. If the product is atomized ventilation should be used.

**Personal Protective Equipment (PPE):**

**Eyes:** Safety glasses recommended.  
**Skin:** Impermeable gloves should be worn.  
**Inhalation:** Use only in a ventilated area.

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## 9. CHEMICAL AND PHYSICAL PROPERTIES

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<b>Physical state:</b>	Liquid
<b>Color:</b>	Nearly colorless
<b>Odor:</b>	Characteristic odor (isopropanol)
<b>Odor Threshold:</b>	Not available
<b>pH Value:</b>	Not determined
<b>Melting Point:</b>	-15°C (estimate, isopropanol solution)
<b>Freezing Point:</b>	-15°C (estimate, isopropanol solution)
<b>Initial Boiling Point:</b>	82°C (isopropanol)
<b>Flash Point:</b>	24°C (estimate, isopropanol solution)





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<b>Evaporation rate:</b>	Not available
<b>Flammability (solid, gas):</b>	Flammable vapors
<b>Explosion limits:</b>	2.0-12.7 vol% (isopropanol)
<b>Vapor pressure:</b>	Not determined
<b>Vapor density:</b>	2.0 (air 1.0)
<b>Solubility:</b>	Soluble in water
<b>Partition coefficient:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not determined

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### 10. STABILITY AND REACTIVITY

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<b>Chemical stability:</b>	Stable under ambient temperatures and pressures
<b>Possibility of hazardous reactions:</b>	Releases oxygen slowly as hydrogen peroxide decomposes. Will release oxygen at an accelerated rate with increasing temperature and with exposure to certain metals. Will not polymerize.
<b>Conditions to avoid:</b>	No specific conditions to avoid have been identified.
<b>Materials to avoid:</b>	Handle with plastic, stainless steel, and glass. Contact with lead during use releases oxygen gas and is an intended reaction of the product.
<b>Hazardous decomposition products:</b>	Decomposes on extreme heating and produces incompletely burned carbon compounds.

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### 11. TOXICOLOGICAL INFORMATION

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- (a) **acute toxicity** Estimate: calculated oral > 5,000 mg/kg; dermal > 2,000 mg/kg
- (b) **skin corrosion/irritation** Can cause skin irritation
- (c) **serious eye damage/irritation** Severely irritating to the eyes.
- (d) **respiratory or skin sensitization** Not a skin or eye sensitizer
- (e) **germ-cell mutagenicity** Not a germ cell mutagen.
- (f) **carcinogenicity** Not a carcinogen.
- (g) **reproductive toxicity** Not a reproductive toxicant.
- (h) **aspiration hazard** Aspiration hazard category 2 – may be harmful if swallowed and enters airways.

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### 12. ECOLOGICAL INFORMATION

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#### Toxicity:

##### Isopropanol

Fish: Fathead minnow: 1000 ppm; 96 Hr; LC50

Daphnia: 1000 ppm; 96 Hr; LC50

Fish: Golden orfe: 8970-9280 ppm, 48 Hr, LC50

IPA has a high biochemical oxygen demand and a low potential to cause oxygen depletion in aqueous systems. It has a low potential to affect aquatic organisms, secondary waste treatment microbial metabolism, and the germination of some plants. It has a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.

THOD: 2.40 g oxygen/g; COD: 2.23 g oxygen/g; BOD-5: 1.19-1.72 g oxygen/g

##### Hydrogen peroxide

Fish: Channel Catfish: 37.4 mg/L 96h LC50

Fish: Fathead Minnow: 16.4 mg/L 96h LC50

Daphnia Magna: 7.7 mg/L 24h EC50





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Daphnia Pulex: 2.4 mg/L 48h LC50

Physa SP (Freshwater snail): 17.7 mg/L 96h LC50

Hydrogen peroxide in the environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Half life in fresh water ranged from 8h to 20 days, in air from 10-20h, and in soils from minutes to hours depending on microbiological activity and metals present.

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#### 13. DISPOSAL PROCEDURES

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**Waste treatment methods:** Waste (substance and container material) shall be recycled/recovered or disposed of as applicable and in accordance with community (EU) and local legislation. Recycle wherever possible. Consult state land waste management authority for disposal. Bury at an approved site. Recycle containers if possible, or dispose of in an authorized landfill.

**According to the European Waste Catalogue,** Waste Codes are not product specific but application specific. Waste Codes should be assigned by the user based on the application in which the product is used.

**For USA Disposal:** Waste must be disposed of in accordance with federal, state, and local environmental control regulations.

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#### 14. TRANSPORT INFORMATION

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US DOT, IATA, IMO Proper Shipping Name:

Flammable liquids, n.o.s. Hazard Class: 3 UN Number: UN1993 Packing Group: III

Canada TDG Additional Information: Flashpoint 25°C

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#### 15. REGULATORY INFORMATION

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**Safety, health and environmental regulations/legislation specific for the mixture:**

**Other Information:**

**U. S. Regulatory information**

TSCA Inventory Status:	Y
TSCA 12 (b) Export Notification:	Not listed
CERCLA Section 103 (40 CFR 302.4):	N
SARA Section 302 (40 CFR 355.30):	Y
SARA Section 304 (40 CFR 355.40):	N
SARA Section 313 (40 CFR 372.65):	N
OSHA Process Safety (29 CFR 1910.119):	N
SARA Hazard Categories, SARA Sections 311/312 (40 CFR 370.21) -	
Acute Hazard:	Y
Chronic Hazard:	Y
Fire Hazard:	Y
Reactivity Hazard:	N
Sudden Release Hazard:	N

**State Regulations:** California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):  
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Chemical Inventories:  
DSL (Canada)

All ingredients listed or exempt





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TSCA (United States of America)

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All ingredients listed or exempt

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## 16. OTHER INFORMATION

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NFPA Hazard Classification:

Health: 2  
Flammability: 3  
Reactivity: 1  
Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency personnel to address the hazards that are presented by short-term, acute exposure to material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification:

Health: 2  
Flammability: 3  
Reactivity: 1  
Protection: B (See PPE section)

Hazardous Material Identification System (HMIS) hazard ratings are designed to inform employees of chemical hazards in the workplace. The ratings are based on inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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