



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>LPS® Tapmatic® AquaCut</b>
<b>Other means of identification</b>	
<b>Part Number</b>	01216, 01228, 01205
<b>Recommended use</b>	A water-based cutting fluid designed for use on steel, aluminum and other metals except magnesium.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Manufacturer</b>	
<b>Company name</b>	LPS Laboratories, a division of Illinois Tool Works, Inc.
<b>Address</b>	4647 Hugh Howell Rd. Tucker, GA 30084 (U.S.A.)
<b>Country</b>	
<b>In Case of Emergency</b>	Tel: +1 770-243-8800 1-800-424-9300 (inside U.S.) +001 703-527-3887 (outside U.S.)
<b>Website</b>	www.lpslabs.com
<b>E-mail</b>	sds@lpslabs.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	Not applicable.

## 3. Composition/information on ingredients

### Mixtures

This material is not considered to be hazardous according to regulatory guidelines (see Section 15 of the SDS).

## 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth thoroughly. Get medical attention if symptoms occur. If ingestion of a large amount does occur, call a poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

**General information** Call a POISON CENTER or doctor/physician if you feel unwell.

## 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** No unusual fire or explosion hazards noted.

**Special protective equipment and precautions for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire-fighting equipment/instructions** In case of fire and/or explosion do not breathe fumes. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**Specific methods** Move containers from fire area if you can do so without risk.

**General fire hazards** No unusual fire or explosion hazards noted.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protection recommended in Section 8 of the SDS.

**Methods and materials for containment and cleaning up** This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Avoid contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.

**Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropanol (CAS 67-63-0)	PEL	980 mg/m <sup>3</sup> 400 ppm
Phosphoric Acid (CAS 7664-38-2)	PEL	1 mg/m <sup>3</sup>
Sodium Hydroxide (CAS 1310-73-2)	PEL	2 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
Phosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m <sup>3</sup>
	TWA	1 mg/m <sup>3</sup>
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m <sup>3</sup>
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	1225 mg/m <sup>3</sup> 500 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
	TWA	980 mg/m3
		400 ppm
Phosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3
	TWA	1 mg/m3
Sodium Hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m3

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value	Form
Propylene Glycol (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Eye wash fountain is recommended.

**Skin protection****Hand protection**

For prolonged or repeated skin contact use suitable protective gloves. Chemical resistant gloves are recommended.

**Other**

Avoid contact with the skin. Wear suitable protective clothing and gloves. Chemical resistant gloves.

**Respiratory protection**

Do not breathe dust/fume/gas/mist/vapors/spray. In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**

None known.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

<b>Appearance</b>	Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Clear, Blue green
<b>Odor</b>	Cinnamon
<b>Odor threshold</b>	Not established
<b>pH</b>	8 - 9
<b>Melting point/freezing point</b>	Not established
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	None
<b>Evaporation rate</b>	1 (water = 1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	None
<b>Flammability limit - upper (%)</b>	None
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	18 mm Hg @ 20°C

<b>Vapor density</b>	~0.6
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	100 % in water
<b>Partition coefficient (n-octanol/water)</b>	< 1
<b>Auto-ignition temperature</b>	> 33.8 °F (> 1 °C)
<b>Decomposition temperature</b>	Not established
<b>Viscosity</b>	Not established
<b>Other information</b>	
<b>Heat of combustion</b>	Not established
<b>Percent volatile</b>	95 %
<b>Specific gravity</b>	0.99 - 1.01 @ 20°C
<b>VOC (Weight %)</b>	0 % per U.S. State and Federal Consumer Product Regulations

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	This product may react with oxidizing agents. Avoid high temperatures.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Inhalation</b>	May cause irritation to the respiratory system.
<b>Skin contact</b>	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
<b>Eye contact</b>	May be irritating to eyes.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Isopropanol (CAS 67-63-0)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg 16.4 ml/kg
<i>Inhalation</i>		
LC50	Rat	> 10000 ppm
<i>Oral</i>		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
<i>Other</i>		
LD50	Mouse	1509 mg/kg
	Rat	1099 mg/kg

Components	Species	Test Results
Phosphoric Acid (CAS 7664-38-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 1260 mg/kg
<i>Inhalation</i>		
LC50	Mouse	25.5 mg/m <sup>3</sup>
<i>Oral</i>		
LD50	Mouse	1250 mg/kg
	Rat	1500 mg/kg
Propylene Glycol (CAS 57-55-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Dog	19 g/kg
	Guinea pig	18.4 g/kg
	Mouse	23.9 g/kg
	Rabbit	18 g/kg
	Rat	22000 mg/kg
<i>Other</i>		
LD50	Mouse	6630 mg/kg
	Rat	6423 mg/kg
Sodium Hydroxide (CAS 1310-73-2)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rabbit	325 mg/kg
<i>Other</i>		
LD50	Mouse	40 mg/kg
Triethanolamine (CAS 102-71-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Guinea pig	5300 mg/kg
	Rat	6400 mg/kg
<i>Other</i>		
LD50	Mouse	1450 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>ACGIH Carcinogens</b>	
Isopropanol (CAS 67-63-0)	Not classifiable as a human carcinogen. A4
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.

<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Chronic effects</b>	Prolonged or repeated contact may cause drying, cracking, or irritation.
<b>Further information</b>	This product has no known adverse effect on human health.

## 12. Ecological information

**Ecotoxicity** Not expected to be harmful to aquatic organisms.

Components		Species	Test Results
Isopropanol (CAS 67-63-0)			
<b>Aquatic</b>			
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	> 1400 mg/l, 96 hours
Propylene Glycol (CAS 57-55-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia magna</i> )	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	710 mg/l, 96 hours
Sodium Hydroxide (CAS 1310-73-2)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Ceriodaphnia dubia</i> )	34.59 - 47.13 mg/l, 48 hours
Fish	LC50	Western mosquitofish ( <i>Gambusia affinis</i> )	125 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Ceriodaphnia dubia</i> )	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	10610 - 13010 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** Expected to biodegrade.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

LPS® Tapmatic® AquaCut	< 1
Isopropanol	0.05
Propylene Glycol	-0.92
Triethanolamine	-1

**Mobility in soil** Readily absorbed into soil.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

## 15. Regulatory information

### US federal regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Phosphoric Acid (CAS 7664-38-2) LISTED

Sodium Hydroxide (CAS 1310-73-2) LISTED

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

Isopropanol (CAS 67-63-0)

Phosphoric Acid (CAS 7664-38-2)

Sodium Hydroxide (CAS 1310-73-2)

Triethanolamine (CAS 102-71-6)

#### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

#### US. Pennsylvania RTK - Hazardous Substances

Isopropanol (CAS 67-63-0)

Phosphoric Acid (CAS 7664-38-2)

Propylene Glycol (CAS 57-55-6)

Sodium Hydroxide (CAS 1310-73-2)

Triethanolamine (CAS 102-71-6)

#### US. Rhode Island RTK

Isopropanol (CAS 67-63-0)

Phosphoric Acid (CAS 7664-38-2)

Sodium Hydroxide (CAS 1310-73-2)

#### US. California Proposition 65

Not Listed.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

<b>Issue date</b>	10-02-2013
<b>Version #</b>	01
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0

**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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.