MATERIAL SAFETY DATA SHEET
Tapmatic® TriCut® Cutting Fluid

Revision 3 **Revision Date 12/18/08** **Supercedes: 1/31/03**

Section 1 • Product and Company Identification

Product Name:	Tapmatic® TriCut® Cutting Fluid
Part Number:	05316, 0538, C05316, C05328
Chemical Name:	Chloroalkanes and sulfurized fatty acid ester mixture
Product Use:	A metal-cutting fluid designed for machining hard metals such as stainless steels especially in hand-tapping applications.
Manufacturer Information:	LPS Laboratories, 4647 Hugh Howell Rd., Tucker, GA, USA 30084
TEL:	1 770-243-8880
Emergency Telephone Number:	1-800-424-9300 Chemtrec; Outside U.S.: (703) 527-3887
FAX:	1 770-243-8899
Website:	http://www.lpslabs.com

PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably won't help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, don't hesitate to call us at 800/241-8334.

Worker Toxicity

Tapmatic® TriCut® Cutting Fluid is a metal-cutting fluid designed for machining hard metals. It contains chloroalkanes, which can be irritating to skin. We suggest you wear gloves and avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breath large amounts of the vapor, (it may irritate the respiratory tract). Don't apply large amounts of Tapmatic® TriCut® Cutting Fluid for extended periods without adequate ventilation. If you're going to perform work involving a lot of product in a poorly ventilated area, use of a respirator may be necessary. For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

Flammability

Tapmatic® TriCut® Cutting Fluid flash point is greater than 150°C, and is considered non-flammable. However, if forced to burn, it will produce a highly irritating and potentially dangerous smoke. For additional information on flammability refer to sections 5, 9, and 16.

Disposal

If you spill Tapmatic® TriCut® Cutting Fluid, notify the proper environmental or safety department. This product, once consumed in the metalworking process, is typically not classified as a hazardous waste. Waste must be disposed of in accordance with national, regional, provincial and local environmental control regulations. See section 13 for more details.

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Emergency Overview: WARNING: May cause eye and skin irritation.

Primary route(s) of entry: Skin and Eye contact. Inhalation.

Potential Acute Health Effects:

Eyes: Irritating to eyes.

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Inhalation may cause irritation of the respiratory tract and/or pulmonary injury.

Ingestion: Product has a low order of acute oral toxicity, but ingestion may cause nausea, vomiting, and gastrointestinal irritation. Minute amounts aspirated into lungs during ingestion may cause pulmonary injury.

Potential Chronic Health Effects:

Carcinogenic Effects: See Section 11
NTP: No **IARC:** No **OSHA:** No

Mutagenic Effects: None known.

Teratogenic Effects: None known.

Target Organ Effects: None known.

Medical conditions aggravated by exposure: Persons with pre-existing skin disorders or chronic respiratory diseases should avoid exposure.

Signs and Symptoms: Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

Section 3 – Composition / Information on Ingredients

Components	CASRN	Weight Percent
Chloroalkanes	61788-76-9	40 - 50%

**The remaining ingredients are not classified as hazardous per 29 CFR 1910.1200 Subpart Z*

Section 4 – First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do not use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately.

Section 5 – Fire Fighting Measures

Products of Combustion: Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include hydrogen chloride, chlorine, sulfur compounds, carbon monoxide and carbon dioxide.

Firefighting media: Use CO_2, DRY chemical powder, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto ignition or explosions.

Sensitivity to Impact: None. **Sensitivity to Static Discharge:** None

Protection Clothing (Fire): Concentrated vapors can be ignited by high intensity ignition source. Firefighters should wear self-contained, positive pressure breathing apparatus and full protective clothing due to thermal decomposition products.

General Fire Hazards: While this material is not considered flammable, high heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.

Section 6 – Accidental Release Measures

Containment Procedures	**Small Spill and Leak:**	Absorb with an inert material and dispose of properly.
	Large Spill and Leak:	Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal.
Clean-Up Procedures	Recover free product and place in suitable container for disposal. Do not allow to enter drains, sewers or waterways. Spillages or uncontrolled discharges into waterways must be alerted to the Environment Agency or other appropriate regulatory body.	
Evacuation Procedures	Ventilate area of leak or spill. Keep unnecessary and unprotected people away.	
Special Procedures	Ventilate area. Wear appropriate protective equipment during cleanup.	

Section 7 – Handling and Storage

Handling: Do not allow material to come into contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Do not breathe vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.

Storage: Keep in original container. Keep container tightly closed. Store in a well ventilated area away from sources of ignition.

Section 8 – Exposure Controls / Personal Protection

Exposure Guidelines:

Component	CASRN	OSHA TWA-PEL	OSHA STEL	ACGIH-TLV	ACGIH-STEL	NIOSH REL
Chloroalkanes	61788-76-9	Not Established	Not Established	Not Established	Not Established	Not Established

Engineering measures Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above.

Personal protective equipment

Eye protection Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

Hand protection Use gloves chemically resistant to this material and conforming to appropriate regulations (i.e., nitrile). Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves. Take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and the contact time.

Respiratory protection Typical use of this product under normal conditions does not require the use of respiratory protection. If airborne concentrations are above the applicable exposure limits use NIOSH approved respiratory protection.

Section 9 – Physical and Chemical Properties

Appearance:	Clear liquid.	**Color:**	Clear, light brown
Odor/Taste:	Sulfur/Pine	**Evaporation Rate:**	Nil
Solubility Description:	Nil	**Flash Point (°C):**	>150°C(302°F) PMCC
Odour Threshold:	Not Determined.	**Decomposition Temperature:**	Not Determined.
Boiling Point:	150°C(302°F)	**Auto Ignition Temperature :**	Not Determined.
Specific Gravity (Water=1):	1.1 – 1.2	**Partition Coefficient (octanol/water):**	<1
Vapour Density (Air=1):	Not Determined.	**Volatiles:**	<0%
Vapour Pressure @ 20 °C:	Not Determined.	**V.O.C. content**	<0%
pH:	Not applicable	**Viscosity:**	130 - 160 cPs
Flammable limits (estimated):	Not Determined.	**Melting Point (°C):**	Not Applicable

Section 10 – Chemical Stability and Reactivity

Chemical Stability: Product is stable under recommended storage conditions.

Conditions to Avoid: Keep away from heat and ignition sources.

Incompatibility: Extremely reactive or incompatible with oxidizing agents.

Hazardous Decomposition: Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include oxides of sulfur, chlorine, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 – Toxicological Information

A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

B: Component Analysis

Component	CASRN	LC-50	LD-50
Chloroalkanes	61788-76-9	Not Established	Not Established

Section 12 – Ecological Information

Mobility: Non-volatile. Readily absorbed into soil.

Persistence and degradability: Non-biodegradable

Bioaccumulative potential: Significant bioaccumulation potential.

Other adverse effects: Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Ecotoxicology

Effect on Organisms	Component	CASRN	Test	Species	Results
Acute Toxicity on Fishes	No Data				
Acute Toxicity on Daphnia	Chloroalkanes	61788-76-9	48hr- EC_{50}	Daphnia magna	0.0059 mg/L
Bacterial inhibition	No Data Available				
Growth inhibition of algae	No Data				
Bioaccumulation in fish					

Section 13 – Disposal Considerations

Waste Status: Under 40 CFR 261.7 (U.S.) this material, if disposed of in its received form is not considered a hazardous waste

Disposal: Waste must be disposed of in accordance with national, regional, provincial, and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.

Section 14 – Transportation Information

This product is not regulated by any mode of transportation.

Section 15 – Regulatory Information

U.S. Federal Regulations

RCRA Hazardous Waste No.: None

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): None

Toxic Substances Control Act (TSCA): All components of this product are TSCA inventory listed and/or are exempt.

Superfund Amendments and Reauthorization Act (SARA) Title III
SARA Section 311/312 (40 CFR 370) Hazard Categories: None

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372): None

Section 112 Hazardous Air Pollutants (HAPs): None

State Regulations

California: This product contains chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm.

New Jersey Right to Know:
Chloroalkanes 61788-76-9● Chlorinated Paraffin 68410-99-1 ● Sulfurized Fatty Acid Ester 68991-18-4 ● Chlorinated Fatty Ester 68440-29-9 ● Pine Oil 8002-09-3

International Regulations

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System WHMIS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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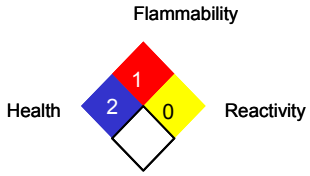
WHMIS Classification:

Class D2B

Other Regulations

Montreal Protocol listed ingredients:	None.
Stockholm Convention listed ingredients:	None.
Rotterdam Convention listed ingredients:	None.
RoHS Compliant:	Yes.

Section 16 • Other Information

	HMIS 1996		HMIS III		NFPA
MSDS# 15316 **Responsible Name:** **Clea Johnson** **Regulatory Affairs Coordinator**	Health:	2	Health:	[/]2	
	Flammability:	1	Flammability:	1	
	Reactivity	0	Physical Hazard:	0	

Notice to Reader:
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
Clea Johnson, Regulatory Affairs Coordinator
LPS Laboratories, A division of Illinois Tool Works