SAFETY DATA SHEET

1. Identification

Product identifier: LPS® Tapmatic® #1 Gold

Other means of identification:
- Part Number: 40320, 40330, 40340

Recommended use: A metal-cutting fluid designed for machining a variety of metals from steel to aluminium in lower speed applications such as hand-tapping.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- Manufacturer: LPS Laboratories, a division of Illinois Tool Works, Inc.
  - Address: 4647 Hugh Howell Rd., Tucker, GA 30084
  - Country: (U.S.A.)
  - Tel: +1 770-243-8800
  - In Case of Emergency: 1-800-424-9300 (inside U.S.)
  - +001 703-527-3887 (outside U.S.)
  - Website: www.lpslabs.com
  - E-mail: sds@lpslabs.com

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards:
- Category 2 Skin corrosion/irritation
- Category 2A Serious eye damage/eye irritation
- Category 1 Aspiration hazard

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Signal word: Danger
- Hazard statement: May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation.
- Precautionary statement:
  - Prevention: Wash thoroughly after handling. Wear protective gloves. Wear eye/face protection.
  - Response: If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If in eyes: 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/attention. If on skin: Wash with plenty of water. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
  - Storage: Store locked up.
  - Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
### 4. First-aid measures

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed**
Dermatitis. Rash. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin irritation. May cause an allergic skin reaction. May cause redness and pain.

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

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. 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 (CO2).

**Unsuitable extinguishing medium**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**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. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

**Methods and materials for containment and cleaning up**
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.

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

### 7. Handling and storage

**Precautions for safe handling**
Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store locked up. 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. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Acetate (CAS 140-11-4)</td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**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**

Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection**

Chemical resistant gloves are recommended.

**Other**

Wear suitable protective clothing.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**

Not applicable.

**General hygiene considerations**

When using, do not eat, drink or smoke. 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

**Appearance**

Liquid.

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Gold.

**Odor**

Slight petroleum odor

**Odor threshold**

Not established

**pH**

Not applicable

**Melting point/freezing point**

Not established

**Initial boiling point and boiling range**

465.8 °F (241 °C)

**Flash point**

300.2 °F (149.0 °C) Cleveland Open Cup

**Evaporation rate**

< 0.1 BuAc

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)**

Not established

**Flammability limit - upper (%)**

Not established

**Explosive limit - lower (%)**

Not available.

**Explosive limit - upper (%)**

Not available.

**Vapor pressure**

< 0.05 mm Hg @ 20°C

**Vapor density**

> 1 (air = 1)

**Relative density**

Not available.

**Solubility(ies)**

Not soluble

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

< 1

**Auto-ignition temperature**

Not established

**Decomposition temperature**

Not established
Viscosity $\leq 20 \text{ mm}^2/\text{s}$

Other information
- Heat of combustion: Not established
- Percent volatile: 0%
- Specific gravity: 0.88 - 0.9 @20°C
- VOC (Weight %): 0% per US State & Federal Consumer Product Regulations

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

- Ingestion
May be harmful if swallowed. May be fatal if swallowed and enters airways.

- Inhalation
Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

- Skin contact
Causes skin irritation.

- Eye contact
Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Irritating to eyes, respiratory system and skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Exposure may cause temporary irritation, redness, or discomfort.

Information on toxicological effects

Acute toxicity
May be harmful if swallowed. May be fatal if swallowed and enters airways.

Components

<table>
<thead>
<tr>
<th>Benzyl Acetate (CAS 140-11-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Mouse</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dipropylene Glycol Monobutyl Ether (CAS 29911-28-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
</tr>
<tr>
<td>LC50</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>&gt; 42.1 ppm</td>
</tr>
<tr>
<td>&gt; 2.04 mg/l</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methyl Oleate (CAS 67762-26-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Rabbit</td>
</tr>
<tr>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
Petroleum Oil (CAS 64742-52-5) |  
**Acute**  
*Dermal*  
LD50 | Rabbit | > 2000 mg/kg  
**Inhalation**  
LC50 | Rat | > 2.5 mg/l  
**Oral**  
LD50 | Rat | > 2000 mg/kg

**Skin corrosion/irritation**  
Causes skin irritation.

**Serious eye damage/eye irritation**  
Causes serious eye irritation.

**Respiratory or skin sensitization**  
**Respiratory sensitization**  
Not a respiratory sensitizer.

**Skin sensitization**  
This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**  
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**  
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**ACGIH Carcinogens**  
Benzyl Acetate (CAS 140-11-4)  
A4 Not classifiable as a human carcinogen.

**IARC Monographs. Overall Evaluation of Carcinogenicity**  
Benzyl Acetate (CAS 140-11-4)  
3 Not classifiable as to carcinogenicity to humans.

Not listed.

**Reproductive toxicity**  
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**  
Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure**  
Based on available data, the classification criteria are not met.

**Aspiration hazard**  
May be fatal if swallowed and enters airways.

**Chronic effects**  
Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**  
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Acetate (CAS 140-11-4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Aquatic**  
Fish | LC50 | Medaka, high-eyes (Oryzias latipes)  
3.48 - 4.6 mg/l, 96 hours |

**Persistence and degradability**  
Not inherently biodegradable.

**Bioaccumulative potential**  
Not available.

**Partition coefficient n-octanol / water (log Kow)**  
Benzyl Acetate  
1.96

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

**Other adverse effects**  
None known.

### 13. Disposal considerations

**Disposal instructions**  
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**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
This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

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
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Benzyl Acetate (CAS 140-11-4)

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.
## US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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

- **Issue date**: 05-21-2014
- **Version #**: 01

**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.