# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>PRODUCT NAME:</th>
<th>STARRETT M-1 All Purpose Lubricant Low VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT NUMBER(S):</td>
<td>93221, 93227, 93233</td>
</tr>
<tr>
<td>TRADE NAME:</td>
<td>STARRETT</td>
</tr>
<tr>
<td>GENERAL USE:</td>
<td>Lubricant</td>
</tr>
<tr>
<td>CHEMICAL FAMILY:</td>
<td>Mixed Organic</td>
</tr>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Amber liquid</td>
</tr>
<tr>
<td>MANUFACTURED FOR:</td>
<td>The L.S. Starrett Company</td>
</tr>
<tr>
<td>ADDRESS (NUMBER, STREET, P.O. BOX):</td>
<td>121 Crescent St.</td>
</tr>
<tr>
<td>(CITY, STATE AND ZIP CODE):</td>
<td>Athol, MA 01331</td>
</tr>
<tr>
<td>COUNTRY:</td>
<td>USA</td>
</tr>
<tr>
<td>DATE:</td>
<td>February 24, 2011</td>
</tr>
<tr>
<td>DATE PREPARED:</td>
<td>February 24, 2011</td>
</tr>
<tr>
<td>SUPERSEDES:</td>
<td>December 4, 2009</td>
</tr>
<tr>
<td>TELEPHONE NUMBER FOR INFORMATION / Customer Service:</td>
<td>ChemTel 24-HOUR EMERGENCY TELEPHONE NUMBER</td>
</tr>
<tr>
<td></td>
<td>1-800-255-3924</td>
</tr>
<tr>
<td></td>
<td>01-813-248-0574</td>
</tr>
<tr>
<td>North America Toll Free</td>
<td>International</td>
</tr>
</tbody>
</table>

## SECTION 2 - HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>% (by Weight)</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>Hazard Symbol</th>
<th>RISK PHRASES (Full Text Section 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrotreated light distillate</td>
<td>85</td>
<td>64742-47-8</td>
<td>265-149-8</td>
<td>Xn</td>
<td>R-65, 66, 67</td>
</tr>
<tr>
<td>Petroleum</td>
<td>7 - 13</td>
<td>8009-03-8</td>
<td>232-373-2</td>
<td>None</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Notes: Hazard symbols and risk phrases based on maximum listed concentration of each hazardous ingredient.

## SECTION 3 - HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW
Amber liquid, potentially hazardous vapors. Combustible as defined by DOT and TDG for Air / Ocean transport. Classified by DOT as Combustible for ground transport in containers less than 120 gallons. Classified as Combustible by OSHA. Can cause serious or fatal complications if swallowed. Can cause eye and skin irritation upon contact. Inhalation of vapors can cause anesthetic effect leading to death in poorly ventilated areas. Hazard symbols for this product - Xn, Risk Phrases - R 65, 66, 67

### POTENTIAL HEALTH EFFECTS

#### INHALATION:
High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise.

#### SKIN:
Brief contact may cause slight irritation; prolonged contact may cause moderate irritation or dermatitis.

#### EYES:
High vapor concentration or contact may cause irritation and discomfort.

#### INGESTION:
May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts

#### CARCINOGENICITY:
NTP? No
IARC MONOGRAPHS? No
OSHA REGULATED? No

## SECTION 4 - FIRST AID MEASURES

### INHALATION:
Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

### EYES:
Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

### SKIN:
Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse, if irritation persists, seek medical attention.

### INGESTION:
DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs, seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.
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SECTION 5 - FIRE FIGHTING MEASURES

GENERAL HAZARDS:
Product is combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

EXTINGUISHING MEDIA:
Carbon dioxide, water fog, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES:
Firefighters must wear full facepiece self-contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire - exposed containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface. Caution - Material is combustible!

HAZARDOUS COMBUSTION PRODUCTS:
Smoke, fumes, oxides of carbon.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
COMBUSTIBLE - Evacuate and ventilate area, remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. Vapor may form explosive mixtures in air. All sources of ignition should be controlled. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENTS</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrotreated light distillate</td>
<td>500</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Petrolatum</td>
<td>2000</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

PERSONAL PROTECTION

RESPIRATORY PROTECTION:
None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES:
Neoprene gloves, butyl or nitrile rubber gloves with cuffs.

EYE PROTECTION:
Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
Safety eyewash station nearby.

WORK / HYGIENIC PRACTICES:
Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE AND ODOR</td>
<td>VAPOR PRESSURE</td>
</tr>
<tr>
<td></td>
<td>&lt; 0.5 mm Hg @ 20°C C</td>
</tr>
<tr>
<td>VOC</td>
<td>SPECIFIC GRAVITY (WATER = 1)</td>
</tr>
<tr>
<td>327 grams/liter</td>
<td>SOLUBILITY IN WATER</td>
</tr>
<tr>
<td></td>
<td>Negligible</td>
</tr>
<tr>
<td>BOILING POINT / BOILING RANGE</td>
<td>VISCOSITY</td>
</tr>
<tr>
<td>370 - 470°F (187.8 - 243.3°C)</td>
<td>Like that of water</td>
</tr>
<tr>
<td>(liquid phase)</td>
<td></td>
</tr>
<tr>
<td>FLASH POINT</td>
<td>VAPOR DENSITY (AIR = 1)</td>
</tr>
<tr>
<td>152°F (67°C) TCC</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>FLAMMABLE LIMITS</td>
<td>EVAPORATION RATE (WATER = 1)</td>
</tr>
<tr>
<td>LEL: 1.0%</td>
<td></td>
</tr>
<tr>
<td>UEL: 6.0%</td>
<td></td>
</tr>
</tbody>
</table>
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PRODUCT NUMBER(S): 93221, 93227, 93233
DATE: February 24, 2011

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: STABLE
CONDITIONS TO AVOID: Extreme temperatures, open flames.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizers, strong acids.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS #</th>
<th>LD50 of ingredient (Specify Species and Route)</th>
<th>LC50 of ingredient (Specify Species)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrotreated light distillate</td>
<td>64742-47-8</td>
<td>&gt; 5000 mg / kg Oral - rat</td>
<td>ND</td>
</tr>
<tr>
<td></td>
<td>265-148-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petrolatum</td>
<td>8009-03-8</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td></td>
<td>232-373-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 12 - ECOLOGICAL INFORMATION

WASTE DISPOSAL METHOD:
According to the European Waste Catalogue, waste codes are application specific and should be assigned by the user based on the application for which the product is used. Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors in a closed disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

SECTION 13 - DISPOSAL INFORMATION

PROPER SHIPPING NAME: Not Regulated (less than 119 gal/ 450 L) UN 1993, Flammable Liquids, n.o.s. (Bulk Ship)
DOT HAZARD CLASS / Pack Group: Class 3, PG III (Bulk)
IATA HAZARD CLASS / Pack Group: Class 3, PG III (Bulk)
IMDG HAZARD CLASS: Class 3, PG III (Bulk Ship)
RID/ADR Dangerous Goods Code: Class 3, PG III
TDG Class / Pack Group: Same as US

HAZARD SYMBOLS: Flammable Liquid (Bulk Shipments)

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.
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PRODUCT NAME: STARRETT M-1 All Purpose Lubricant Low VOC
PRODUCT NUMBER(S): 93221, 93227, 93333
DATE: February 24, 2011

SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): All components are listed under TSCA Section 8(b).
SARA TITLE III (USA - Superfund Amendments and Reauthorization Act): Immediate health.
Acute Health: Yes
Fire: Yes
Reactive: No
Chronic Health: Yes
Sudden Release of Pressure: No

313 REPORTABLE INGREDIENTS: None
CERCLA (USA - Comprehensive Response Compensation and Liability Act): None
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: None
CCPR (Canadian Controlled Products Regulations): 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. WHMIS Classification: B3
CIDL (Canadian Ingredient Disclosure List): Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.
CDSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Referenced on CDSL.
EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.

VGK Water Quality Index: 2

RISK PHRASES:
R65: Damaging to lungs when swallowed.
R66: Repeated exposure may cause skin dryness or cracking.
R67: Vapors may cause drowsiness and dizziness.

SYMBOL(S) REQUIRED FOR EU LABEL

SAFETY PHRASES: S2 : Keep out of the reach of children.

Harmful

SECTION 16 - OTHER INFORMATION

Legend
NA = Not Applicable
ND = Not Determined
NE = Not Established
NR = Not Reported

HMIS HAZARD RATINGS

<table>
<thead>
<tr>
<th>HEALTH:</th>
<th>FLAMMABILITY:</th>
<th>PHYSICAL HAZARD:</th>
<th>PERSONAL PROTECTIVE EQUIPMENT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

1 = INSIGNIFICANT
2 = SLIGHT
3 = MODERATE
4 = HIGH
5 = EXTREME

REVISED SUMMARY:

MSDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Tel/Fax: North America 1-888-285-3924 Int. +1-813-248-0573
Website: www.chemtelinc.com

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturer of the components of the product. Users are advised to confirm in advance of need that information is current, applicable, and suited to the circumstances of use. Vendor assumes no responsibility for injury to vended or third persons proximately caused by the material. Irresponsible safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material, even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product, as described in Section 1.