

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: June 14, 2019

1 Identification

- **Product identifier**
- **Trade name:** Starrett M-1 All Purpose Lubricant Low VOC
- **Other means of identification:**
 - 93221 – 1 Gallon Container
 - 93227 – 5 Gallon Pail
 - 93233 – 53 Gallon Drum
- **Recommended use and restriction on use**
- **Recommended use:** Rust preventative
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
 - The L.S. Starrett Company
 - 121 Crescent St.
 - Athol, MA 01331
 - (978) 249-3551
- **Emergency telephone number:**
 - ChemTel Inc.
 - (800)255-3924 (North America)
 - +1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
 - Flam. Liq. 4 H227 Combustible liquid.
 - Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **GHS label elements**
 - The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS08

- **Signal word:** Danger
- **Hazard statements:**
 - H227 Combustible liquid.
 - H304 May be fatal if swallowed and enters airways.
- **Precautionary statements:**
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P280 Wear protective gloves/protective clothing/eye protection.
 - P301+P310 If swallowed: Immediately call a poison center/doctor.
 - P331 Do NOT induce vomiting.
 - P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
 - P403+P235 Store in a well-ventilated place. Keep cool.
 - P405 Store locked up.

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations. (Cont'd. of page 1)

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

64742-47-8	Distillates (petroleum), hydrotreated light	 Asp. Tox. 1, H304 Flam. Liq. 4, H227	>80%
	Trade Secret Calcium oxidate	Eye Irrit. 2B, H320	1-5%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air.

If experiencing respiratory symptoms: Call a poison center/doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying on their back should be turned onto their side.

· **Most important symptoms and effects, both acute and delayed:**

Breathing difficulty

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Coughing

Headache

· **Danger:**

May be fatal if swallowed and enters airways.

Danger of impaired breathing.

· **Indication of any immediate medical attention and special treatment needed:**

If swallowed or in case of vomiting, danger of entering the lungs.

If necessary oxygen respiration treatment.

Later observation for pneumonia and pulmonary edema.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 - Carbon dioxide
 - Gaseous extinguishing agents
 - Water fog / haze
 - Fire-extinguishing powder
 - Foam
- **For safety reasons unsuitable extinguishing agents:** Water stream.
- **Special hazards arising from the substance or mixture**
 - Combustible liquid.
 - Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.
- **Additional information:**
 - Eliminate all ignition sources if safe to do so.
 - Cool endangered containers with water fog.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 - Ensure adequate ventilation.
 - Keep away from ignition sources.
 - For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions**
 - Avoid release to the environment.
 - Prevent from spreading (e.g. by damming-in or oil barriers).
- **Methods and material for containment and cleaning up**
 - Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Avoid splashes or spray in enclosed areas.
 - Use only in well ventilated areas.
 - Open and handle receptacle with care.
 - Keep out of reach of children.
- **Information about protection against explosions and fires:**
 - Combustible liquid.

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Keep ignition sources away - Do not smoke.

- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
Avoid storage near extreme heat, ignition sources or open flame.
Store in cool, dry conditions in well sealed receptacles.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

· Control parameters

- **Components with limit values that require monitoring at the workplace:**

64742-47-8 Distillates (petroleum), hydrotreated light

EL (Canada)	Long-term value: 200 mg/m ³ Skin
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· Exposure controls

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid close or long term contact with the skin.

Avoid breathing mist, vapors, or spray.

- **Engineering controls:** Provide adequate ventilation.

· Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.

· Protection of hands:

Gloves are advised for repeated or prolonged contact.

Wear protective gloves to handle contents of damaged or leaking units.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing

· Limitation and supervision of exposure into the environment

Avoid release to the environment.

- **Risk management measures** No relevant information available.

9 Physical and chemical properties

· Information on basic physical and chemical properties

- **Appearance:**

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· Form:	Liquid
· Color:	Hazy. Yellow
· Odor:	Mild Hydrocarbon
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	222.8-245 °C (433-473 °F)
· Flash point:	76.7 °C (170.1 °F)
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	>220 °C (>428 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Not determined.
· Explosion limits	
Lower:	0.6 Vol %
Upper:	5.5 Vol %
· Oxidizing properties:	Non-oxidizing.
· Vapor pressure:	Not determined.
· Density:	
Relative density:	0.8
Vapor density:	Not determined.
Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Combustible liquid.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with strong acids.

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Reacts with strong oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.

· **Conditions to avoid**

Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.

· **Incompatible materials** Oxidizers

· **Hazardous decomposition products**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Hydrocarbons

11 Toxicological information

· **Information on toxicological effects**

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

· **LD/LC50 values that are relevant for classification:**

64742-47-8 Distillates (petroleum), hydrotreated light

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

· **Primary irritant effect:**

· **On the skin:** Based on available data, the classification criteria are not met.

· **On the eye:** Based on available data, the classification criteria are not met.

· **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Based on available data, the classification criteria are not met.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** May cause drowsiness or dizziness.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

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

12 Ecological information

· **Toxicity**

· **Aquatic toxicity** No relevant information available.

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- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Contact waste processors for recycling information.
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|--|
| · UN-Number
· DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · UN proper shipping name
· DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · Transport hazard class(es)
· DOT, ADR/RID/ADN, IMDG, IATA
· Class | Not regulated. |
| · Packing group
· DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · Environmental hazards
· Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information:
· DOT | Classified as combustible under US DOT regulations. Labeling is only required for single packages ≥ 119 US gal / 450 L. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

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- **United States (USA)**

- **SARA**

- **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **Canadian Domestic Substances List (DSL):**

All ingredients are listed or exempt.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Flam. Liq. 4: Flammable liquids – Category 4

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Asp. Tox. 1: Aspiration hazard – Category 1

- **Sources**

Website, European Chemicals Agency (echa.europa.eu)

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Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor-internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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