

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: STARRETT M-1 All Purpose Lubricant Low VOC
PRODUCT NUMBER(S): MI 95173, MI 93201 **DATE:** December 04, 2009

TRADE NAME: STARRETT
GENERAL USE: Aerosol lubricant
CHEMICAL FAMILY: Mixed Organic
PRODUCT DESCRIPTION:
 Aerosol, amber liquid



MANUFACTURED FOR:
The L.S. Starrett Company

DATE PREPARED: December 4, 2009
SUPERSEDES: May 28, 2009

ADDRESS (NUMBER, STREET, P.O. BOX)
121 Crescent St.

TELEPHONE NUMBER FOR INFORMATION / Customer Service
(978) 249-3551

(CITY, STATE AND ZIP CODE) **COUNTRY**
Athol, MA 01331 **USA**

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER
1-800-255-3924 **01-813-248-0585**
 North America Toll Free International

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	% (by Weight)	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Hydrotreated light distillate	60 - 90	64742-47-8	265-149-8	Xn	R-65, 66, 67
Petrolatum	7 - 13	8009-03-8	232-373-2	NC	Not classified
PROPELLANT: Carbon dioxide	Not specified	124-38-9	204-696-9	NC	Not classified

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

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Aerosol, amber liquid, potentially hazardous vapors. Contains carbon dioxide propellant. Flammable 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 - R10 65

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 aspirated into the lungs can produce severe lung injury, chemical pneumonitis, pulmonary edema or death.

CARCINOGENICITY:

NTP? **No** IARC MONOGRAPHS? **No** OSHA REGULATED? **No**
 CALIFORNIA, Prop.65? **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, water fog, dry chemical, chemical foam.

FIRE FIGHTING PROCEDURES:

Self-contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers can explode due to buildup of pressure when exposed to extreme heat.

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

HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	TLV/TWA ppm	TWA mg/m ³	PEL ppm	PEL mg/m ³
Hydrotreated light distillate	500	2000						
Petrolatum	NE	NE	NE	NE	NE	NE	NE	NE
PROPELLANT: Carbon Dioxide	5000	9000	30000	54000	5000	9000	30000	54000

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

APPEARANCE AND ODOR Amber liquid, pleasant characteristic odor	VAPOR PRESSURE < 0.5 mm Hg @ 20° C (liquid) / 856 psia @ 70° F (propellant)
VOC 327 grams/liter	SPECIFIC GRAVITY (WATER = 1) 0.8 (liquid phase)
BOILING POINT / BOILING RANGE 370 - 470° F (187.8 - 243.3° C) (liquid phase)	SOLUBILITY IN WATER Negligible
FLASH POINT 152° F (67° C) TCC	VISCOSITY Like that of water
FLAMMABLE LIMITS <input type="checkbox"/> LEL: 1.0% UEL: 6.0%	VAPOR DENSITY (AIR = 1) > 1
AUTO-IGNITION TEMPERATURE ND	EVAPORATION RATE (WATER = 1) < 1

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SECTION 10 - STABILITY AND REACTIVITY

STABILITY: STABLE x **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. **CONDITIONS TO AVOID:** None related to polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION

Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Hydrotreated light distillate	64742-47-8	LD50 > 5000 mg / kg Oral - rat	ND
	265-149-8		
Petrolatum	8009-03-8	NE	NE
	232-373-2		
PROPELLANT: Carbon Dioxide	124-38-9	NE	LC50 > 470,000 ppm for 30 min Inhalation - rat
	204-696-9		

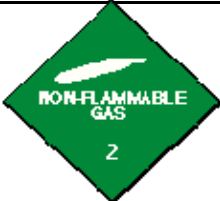
SECTION 12 - ECOLOGICAL INFORMATION

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 13 - DISPOSAL CONSIDERATIONS

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 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: ORM-D (North America), Aerosol, Non-Flammable, UN 1950 (Europe)	
DOT HAZARD CLASS / Pack Group: ORM - D / None	IATA HAZARD CLASS / Pack Group: 2.2 / III
REFERENCE: 49 CFR 173.306	IMDG HAZARD CLASS: 2.2
UN / NA IDENTIFICATION NUMBER: 1950 (Europe)	RID/ADR Dangerous Goods Code: 2.2
LABEL: None (North America), 2.2 (Europe)	UN TDG Class / Pack Group: 2.2
HAZARD SYMBOLS:	Hazard Identification Number (HIN): 20
	

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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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, sudden release of pressure.**

Acute Health: Yes	Chronic Health: Yes
Fire: Yes	Sudden Release of Pressure: Yes
Reactive: 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: A, 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**
 WGK Water Quality Index: **2**

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU/GGHS LABEL	SAFETY PHRASES:
R65 : Damaging to lungs when swallowed. R66 : Repeated exposure may cause skin dryness or cracking. R67 : Vapors may cause drowsiness and dizziness.	 Harmful	S2 : Keep out of the reach of children.

SECTION 16 - OTHER INFORMATION

Legend			
NA = Not Applicable	ND = Not Determined	NE = Not Established	NR = Not Reported
HMIS HAZARD RATINGS	HEALTH: FLAMMABILITY: PHYSICAL HAZARD: PERSONAL PROTECTIVE EQUIPMENT:	1 2 0 B	0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME

REVISION SUMMARY:
 Revised to GHS/E.U. protocols 12/4/2009 supersedes 5/28/2009 issue.LB

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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 manufacturers 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 vendee or third persons proximately caused by the material if reasonable 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.