Precision

Since 1880

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: STARRETT M-1 All Purpose Lubricant Low VOC

PRODUCT NUMBER(S): MI 95173 DATE: September 16, 2008

TRADE NAME: STARRETT
GENERAL USE: Aerosol lubricant
CHEMICAL FAMILY: Mixed Organic

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PRODUCT DESCRIPTION:
Aerosol, amber liquid

MANUFACTURED FOR: DATE PREPARED: September 16, 2008

The L.S. Starrett Company SUPERSEDES: October 12, 2005

ADDRESS (NUMBER, STREET, P.O. BOX) TELEPHONE NUMBER FOR INFORMATION / Customer Service

121 Crescent St. (978) 249-3551

(CITY, STATE AND ZIP CODE) COUNTRY CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER

Athol, MA 01331 USA ChemTel 1-800-255-3924 01-813-248-0574
North America Toll Free International

SECTION 2 - HAZARDOUS INGREDIENTS						
Hamandaya Cammananta	0/ (by Maight)	040#	FINEOC #	Hazard	RISK PHRASES	
Hazardous Components	% (by Weight)	CAS#	EINECS #	Symbol	(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:	Not	124-38-9	204-696-9	NC	Not classified	
Carbon dioxide	specified	124 00 0	204 000 0	110	rtot olussilicu	

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								
	NIOSH			ACGIH		OSHA		
HAZARDOUS COMPONENTS	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	PEL ppm	PEL mg/m3
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	VAPOR PRESSURE			
Amber liquid, pleasant characteristic odor	< 0.5 mm Hg @ 20° C (liquid) / 856 psia @ 70° F (propellant)			
VOC	SPECIFIC GRAVITY (WATER = 1)			
327 grams/liter	0.8 (liquid phase)			
BOILING POINT / BOILING RANGE	SOLUBILITY IN WATER			
370 - 470°F (187.8 - 243.3°C) (liquid phase)	Negligible			
FLASH POINT	VISCOSITY			
152°F (67°C) TCC	Like that of water			
FLAMMABLE LIMITS	VAPOR DENSITY (AIR = 1)			
LEL: 1.0 % UEL: 6.0 %	> 1			
AUTO-IGNITION TEMPERATURE	EVAPORATION RATE (WATER = 1)			
ND	<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: CONDITIONS TO AVOID:

Will not occur. None related to polymerization.

SECTION 11 - TOXICOLOGICAL INFORMATION					
Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)		
Hydrotrootod light distillate	64742-47-8 LD50 > 5000 mg / kg		ND		
Hydrotreated light distillate	265-149-8	Oral - rat	ND		
Petrolatum	8009-03-8	NE	NE		
Petrolatum	232-373-2	NE	IAE		
PROPELLANT:	124-38-9	NE	LC50 > 470,000 ppm for 30		
Carbon Dioxide	204-696-9	NE.	min Inhalation - rat		

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: NON FLAMMABLE GAS 2	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):

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:

Walt Water addity mack.	_		
RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU 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 Establis	shed NR = Not	Reported
HMIS HAZARD RATINGS	HEALTH:		1	0 = INSIGNIFICANT
	FLAMMABILITY:		2	1 = SLIGHT
	PHYSICAL HAZARD:		0	2 = MODERATE
	PERSONAL PROTECTIVE	EQUIPMENT:	В	3 = HIGH
				4 = EXTREME

REVISION SUMMARY:

Revised to GHS/E.U. protocols 9/16/2005 supersedes 10/12/2005 issue.LB

MSDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

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 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.