

Printing date 20.02.2014 Revision: 20.02.2014

1 Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Starrett M-1 All Purpose Lubricant Aerosol Low VOC
- · Article number: 95173, 93201
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Aerosol lubricant
- · 1.3 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
- · 1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

2 Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Flam. Aerosol 2 H223-H229 Flammable aerosol. Pressurised container: May burst if heated.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



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- · Signal word Warning
- · Hazard-determining components of labelling:

carbon dioxide

· Hazard statements

H223-H229 Flammable aerosol. Pressurised container: May burst if heated.

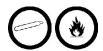
- · Precautionary statements
- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking. P210
- P251 Pressurized container: Do not pierce or burn, even after use.
- Do not spray on an open flame or other ignition source. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- · Additional information:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No

75,0 % by mass of the contents are flammable

- · Hazard description:
- · WHMIS-symbols:
- A Compressed gas
- B5 Flammable aerosol



· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



1 Health = 1

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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3 Composition/information on ingredients

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 64742-47-8	Distillates (petroleum), hydrotreated light	50-100%
EINECS: 265-149-8	Xn R65	
Index number: 649-422-00-2		
	♠ Asp. Tox. 1, H304	
CAS: 124-38-9	carbon dioxide	1-5%
EINECS: 204-696-9	substance with a Community workplace exposure limit	
	Press. Gas, H280	

• Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- · 4.1 Description of first aid measures
- · General information:

In case of irregular breathing or respiratory arrest provide artificial respiration.

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Generally the product does not irritate the skin.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, 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:

Unlikely route of exposure.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

- · Hazards Danger of pulmonary oedema.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• 5.2 Special hazards arising from the substance or mixture No further relevant information available.

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- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

• Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

· 6.4 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

7.1 Precautions for safe handling

No special precautions are necessary if used correctly.

Use only in well ventilated areas.

· Information about fire - and explosion protection:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray onto a naked flame or any incandescent material.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers.

- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

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· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:		
64742-47-8 Distillates (petroleum), hydrotreated light		
EL (Canada)	200 mg/m³ Skin	
124-38-9 carbon dioxide		
IOELV (EU)	9000 mg/m³, 5000 ppm	
PEL (USA)	9000 mg/m³, 5000 ppm	
REL (USA)	Short-term value: 54,000 mg/m³, 30,000 ppm Long-term value: 9000 mg/m³, 5000 ppm	
TLV (USA)	Short-term value: 54,000 mg/m³, 30,000 ppm Long-term value: 9000 mg/m³, 5000 ppm	
EL (Canada)	Short-term value: 15000 ppm Long-term value: 5000 ppm	
EV (Canada)	Short-term value: 54,000 mg/m³, 30,000 ppm Long-term value: 9,000 mg/m³, 5,000 ppm	

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

Butyl rubber, BR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Safety glasses

· Body protection: Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Aerosol

Colour:
Odour:
Odour threshold:
Amber coloured
Characteristic
Not determined.

pH-value:
Not determined.

· Change in condition

Melting point/Melting range: Not Determined.

Boiling point/Boiling range: Boiling Point Range: 370 - 470 ° F / 187,8 - 243,3 °C.

Not applicable, as aerosol.

Flash point: 152° F / 67 °C
 Flammability (solid, gaseous): Not applicable.
 Auto/Self-ignition temperature: 410° F / 210 °C
 Decomposition temperature: Not determined.

· **Self-igniting:** Product is not self-igniting.

· Danger of explosion: Not determined.

· Explosion limits:

Lower: 0,5 Vol % **Upper:** 6,5 Vol %

· Vapour pressure at 21 °C: 59700 hPa (866 psia)

Density at 20 °C: 0,8 g/cm³
 Relative density Not determined.
 Vapour density Not determined

Vapour density Evaporation rate Not determined. Not applicable.

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not determined.

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Kinematic: Not determined.

• 9.2 Other information No further relevant information available.

10 Stability and reactivity

- · 10.1 Reactivity
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Danger of receptacles bursting because of high vapour pressure when heated.

Reacts with strong oxidizing agents.

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

11 Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information: Vapours have narcotic effect.

12 Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability Moderately /partly biodegradable
- 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

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· 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

· 14.1 UN-Number

· DOT, ADR, IMDG, IATA UN1950

· 14.2 UN proper shipping name

DOT, IATA
 ADR
 IMDG
 AEROSOLS, flammable
 1950 AEROSOLS
 AEROSOLS

· 14.3 Transport hazard class(es)

· DOT



• Class 2.1 • Label 2.1

· ADR



· Class 2 5F Gases.

· Label 2.1

· IMDG, IATA



• Class 2.1 • Label 2.1

· 14.4 Packing group

· DOT, ADR, IMDG, IATA Not Regulated

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· 14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Warning: Gases.

Danger code (Kemler):

· **EMS Number**: F-D,S-U

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)
 Transport category
 Tunnel restriction code

UN "Model Regulation": UN1950, AEROSOLS, 2.1

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic Categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

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TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Canada

Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

124-38-9 carbon dioxide

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Relevant phrases

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

R65 Harmful: may cause lung damage if swallowed.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Flam. Aerosol 2: Flammable aerosols, Hazard Category 2

Press. Gas: Gases under pressure: Liquefied gas Flam. Liq. 3: Flammable liquids, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1