

SAFETY DATA SHEET

227 Moly Roller Chain Lube (Spray)

Section 1. Identification

GHS product identifier

: 227 Moly Roller Chain Lube (Spray)

Other means of identification : Not available.

Product type

: Aerosol.

Identified uses

Chain lube and penetrating oil.

Supplier's details

: Schaeffer Mfg. Company

102 Barton Street

Saint Louis, Missouri 63104

Tel: 314-865-4100 Fax: 314-865-4107 Toll Free: 1-800-325-9962 E-Mail: safety@schaefferoil.com Web: http://www.schaefferoil.com

Emergency telephone number (with hours of)eration) : +1 314 865-4105 (24-hour response number)

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE AEROSOLS - Category 1

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Extremely flammable aerosol.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand.

Prevention

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on

an open flame or other ignition source.

Response

: Not applicable.

Storage

: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

: Not applicable.

Hazards not otherwise

: None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

| Ingredient name | % | CAS number |
|--|---------|------------|
| Distillates (petroleum), hydrotreated heavy naphthenic | 30 - 60 | 64742-52-5 |
| Solvent naphtha (petroleum), medium aliph. | 5 - 10 | 64742-88-7 |
| Propane | 5 - 10 | 74-98-6 |
| Isobutane | 1 - 5 | 75-28-5 |
| Antimony, dialkyl dithiocarbamate | 1 - 5 | 15890-25-2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: No known significant effects or critical hazards.

Inhalation

: Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Skin contact Ingestion

: No known significant effects or critical hazards. : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact

: Adverse symptoms may include the following:

irritation

Inhalation

: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact

: No known significant effects or critical hazards.

Innantian

No known significant affects or critical beyords

Section 4. First aid measures

dication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

: No specific treatment.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Unsuitable extinguishing media

Specific hazards arising from the chemical

: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides Sulfur oxides metal oxide/oxides

Special protective actions for fire-fighters

: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

ivironmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to all applicable Federal. State. Provincial and local authorities and/or the United States National Response Center at (800) 424-8802 as appropriate or required.

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits | | |
|--|---|--|--|
| Distillates (petroleum), hydrotreated heavy naphthenic | ACGIH TLV (United States, 6/2013). | | |
| | TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 4/2013). | | |
| | TWA: 5 mg/m³ 10 hours. Form: Mist | | |
| | STEL: 10 mg/m³ 15 minutes. Form: Mist | | |
| | OSHA PEL (United States, 2/2013). | | |
| | TWA: 5 mg/m³ 8 hours. Form: Mist | | |
| Solvent naphtha (petroleum), medium aliph. | OSHA PEL (United States, 2/2013). | | |
| | TWA: 100 ppm 8 hours. | | |
| | TWA: 400 mg/m³ 8 hours. | | |
| | OSHA PEL 1989 (United States, 3/1989). | | |
| | TWA: 100 ppm 8 hours. | | |
| | TWA: 400 mg/m³ 8 hours. | | |
| Antimony, dialkyl dithiocarbamate | ACGIH TLV (United States, 6/2013). | | |
| | TWA: 0.5 mg/m³, (as Sb) 8 hours. | | |
| | OSHA PEL (United States, 2/2013). | | |
| | TWA: 0.5 mg/m³, (as Sb) 8 hours. | | |
| | NIOSH REL (United States, 4/2013). | | |
| | TWA: 0.5 mg/m³, (as Sb) 10 hours. | | |

Section 8. Exposure controls/personal protection

- opropriate engineering
- : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Wear eye protection such as safety glasses, chemical goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact.

Skin protection

Hand protection

: Use nitrile or oil resistant gloves.

Body protection

: Personal protective clothing such as gloves, aprons, boots and complete facial protection should be selected based on the task being performed and the risks involved. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing.

Other skin protection

 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

tespiratory protection

: If a risk assessment indicates that respiratory protection is required, use a properly fitted, air-purifying or supplied air respirator that complies with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state

: Liquid. [Cloudy]

Color

: Black.

Odor

: Solvent.

Odor threshold

: Not available.

: Not applicable.

Melting point/ Dropping

: Not available.

Point

Boiling point

: >315°C (>599°F)

Flash point

: Closed cup: >140°C (>284°F) [Pensky-Martens.]

Open cup: >180°C (>356°F) [Cleveland.]

Evaporation rate

: Not available.

Flammability (solid, gas)

: Not available.

Lower and upper explosive

Lower: 1% (based on mineral oil).
 Upper: 10% (based on mineral oil).

(flammable) limits

Opper. 10 % (based off fillineral

Vapor pressure

: Not available.

por density

: >1 [Air = 1]

Relative density

: 1.03 to 1.08

Solubility

: Negligible in water.

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature

: Not available.

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Section 9. Physical and chemical properties

Viscosity

: Not available.

Volatility

: Not available.

VOC content

: 29 % (w/w)

Aerosol product

Type of aerosol Heat of combustion : Spray

: 5.959 kJ/g

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: Avoid breathing mists or vapors.

Incompatible materials

: Reactive or incompatible with the following materials: Strong oxidizing agents.

Hazardous decomposition

products

: Carbon monoxide, carbon dioxide; by products of incomplete combustion.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|--------------------------|---------------|----------------------------|----------|
| Distillates (petroleum), hydrotreated heavy naphthenic | LD50 Oral | Rat | >5000 mg/kg | - |
| Antimony, dialkyl dithiocarbamate | LD50 Dermal LD50 Oral | Rabbit Rat | 16000 mg/kg 16400 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------|---------|-------|----------|-------------|
| Distillates (petroleum), hydrotreated heavy naphthenic | Skin - Severe irritant | Rabbit | - | 500 mg | - |

Sensitization

There is no data available.

Carcinogenicity

Classification

| Product/ingredient name | OSHA | IARC | NTP | ACGIH | EPA | NIOSH |
|--|------|------|-----|-------|-----|-------|
| Distillates (petroleum), hydrotreated heavy naphthenic | - | - | - | A4 | - | - |
| Isobutane | - | - | | - | - | None. |

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

| Name | Result |
|---|---|
| Distillates (petroleum), hydrotreated heavy naphthenic Solvent naphtha (petroleum), medium aliph. | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

Section 11. Toxicological information

oformation on the likely utes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact

: No known significant effects or critical hazards.

Inhalation

: Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Skin contact Ingestion

No known significant effects or critical hazards.No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: Adverse symptoms may include the following:

irritation redness

Inhalation

: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact Ingestion No known significant effects or critical hazards.No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: No known significant effects or critical hazards.

effects

Potential delayed effects

: No known significant effects or critical hazards.

Long term exposure

Potential immediate

: No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Section 12. Ecological information

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

| | DOT Classification | IMDG | IATA | |
|-------------------------------|--------------------|----------|----------|--|
| UN number | UN1950 | UN1950 | UN1950 | |
| UN proper shipping name | AEROSOLS | AEROSOLS | AEROSOLS | |
| Transport hazard class(es) | 2.1 | 2.1 | 2.1 | |
| Packing group | - | - | - | |
| Environmental hazards | No. | No. | No. | |
| Additional information | - | | - | |

AERG : 126

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Antimony, dialkyl dithiocarbamate

Clean Air Act (CAA) 112 regulated flammable substances: Isobutane; Propane

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Section 15. Regulatory information

Clean Air Act Section 602

: Not listed

lass II Substances

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

(Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification

: Fire hazard

SARA 313

| Product name | | CAS number | % |
|---------------------------------|-----------------------------------|------------|-------|
| Form R - Reporting requirements | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |
| Supplier notification | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts

: The following components are listed: Isobutane; Propane; Molybdenum disulphide;

Distillates (petroleum), hydrotreated light naphthenic

New York

None of the components are listed.

New Jersey

: The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Isobutane; Propane; Distillates (petroleum), hydrotreated light naphthenic;

Distillates (petroleum), hydrotreated heavy naphthenic; Antimony, dialkyl

dithiocarbamate

Pennsylvania

: The following components are listed: Isobutane; Propane; Antimony, dialkyl

dithiocarbamate

California Prop. 65

No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health:

Flammability:

Physical hazards:

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health:

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Flammability:

Instability:

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

US Tariff Heading Number : 2710.19.3080

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Section 16. Other information

History

Date of issue mm/dd/yyyy : 11/15/2014

Version

: 1

Revised Section(s)

: Not applicable.

Prepared by

: KMK Regulatory Services Inc.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



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