Issue date: 06-23-2016 Revision date: 08-18-2017 Supersedes date: 06-23-2016 Version number: 2.0



SAFETY DATA SHEET

1. Identification

Product identifier Molylube Synthetic Ester Chain Lubricant

Product Code 301683

Other means of identification

Synonyms Old Product Code 20750; For Package Codes 301683XXXXXX

Product Code 301683

Recommended use of the chemical and restrictions on use

Restrictions on use Chain lubricant

Not available.

Details of manufacturer or importer

Manufacturer

Calumet Branded Products, LLC

GPO Darling Park Towers 2 201 Sussex St. Sydney AU NSW 2000 Australia

2780 Waterfront Pkwy E. Dr., Suite 200 Indianapolis, IN 46214

1 317 328 5660

CHEMTREC: 1800 069 100 (AUS)

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Label elements, including precautionary statements

Hazard symbol(s) None.
Signal word None.

Hazard statement(s) Harmful to aquatic life.

Precautionary statement(s)

Prevention Avoid breathing mist or vapor. Wash thoroughly after handling. Avoid release to the environment.

Use personal protective equipment as required.

Response IF ON SKIN: Wash with plenty of soap and water. Get medical advice/attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

Storage This product is intended for the use in the manufacturing process only.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not

result in classification

Supplemental information 96.58% of the mixture consists of component(s) of unknown acute hazards to the aquatic

environment

None known.

3. Composition/information on ingredients

Mixture

Material name: Molylube Synthetic Ester Chain Lubricant SDS AUSTRALIA

Identity of chemical ingredients CAS number and other unique ingredients Concentration of ingredients Synthetic Oils Proprietary 80 - < 100</td> Other components below reportable levels <5%</td>

4. First-aid measures

Description of necessary first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Personal protection for

first-aid responders

Not available.

Symptoms caused by

exposure

Direct contact with eyes may cause temporary irritation.

Medical attention and special

treatment

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Water fog.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for fire

fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Wear suitable protective equipment.

Hazchem code

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

None.

For non-emergency

personnel

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be

contained. For personal protection, see section 8 of the SDS.

For emergency responders

Not available.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up

This product is miscible in water. Prevent entry into waterways, sewer, basements or confinec areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Material name: Molylube Synthetic Ester Chain Lubricant SDS AUSTRALIA

7. Handling and storage

Precautions for safe handling Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the

environment. Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10 of

the SDS).

8. Exposure controls and personal protection

Control parameters Follow standard monitoring procedures. Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure

limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Always observe good personal hygiene measures, such as washing after handling the material and Hygiene measures

before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to

remove contaminants.

9. Physical and chemical properties

Appearance Oily. **Physical state** Liquid.

Form Liquid. Color Dark grey. Odor

Odor threshold Not available. Not available. pН Not available. Melting point/freezing point Initial boiling point and

boiling range

Not available.

Flash point 431.6 °F (222.0 °C) Pensky-Martens Closed Cup

Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

Not available.

upper (%)

Explosive limit - lower

Not available.

(%)

Explosive limit - upper

(%)

Not available.

Vapor pressure 0.00001 hPa estimated

973.00 kg/m³ **Density** Vapor density Not available.

Material name: Molylube Synthetic Ester Chain Lubricant 301683 Version #: 2.0 Revision date: 08-18-2017 Print date: 08-18-2017 Relative density Not available.

Solubility(ies)

Solubility (water) Negligible

Solubility (other) Oil

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available.

Viscosity 193 cSt ASTM D445 Viscosity temperature 104 °F (40 °C)

Other physical and chemical parameters

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

Pour point -20.2 °F (-29 °C) ASTM D97

Specific gravity 0.97

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Nitrogen oxides (NOx). May include oxides of phosphorus.

11. Toxicological information

Information on possible routes of exposure

Inhalation No adverse effects due to inhalation are expected. Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to

exposure

Direct contact with eyes may cause temporary irritation.

Product Species Test Results

Molylube Synthetic Ester Chain Lubricant

Acute **Dermal**

LD50 Rabbit 17675 ml/kg estimated

Oral

LD50 Rat 89768 mg/kg estimated

43000 ml/kg estimated

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye Direct contact with eyes may cause temporary irritation.

damage/irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Material name: Molylube Synthetic Ester Chain Lubricant

^{*} Estimates for product may be based on additional component data not shown.

Due to lack of data the classification is not possible. Carcinogenicity

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Due to lack of data the classification is not possible.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated

exposure

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Mobility in soil This product is miscible in water.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and

> its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product

residues. This material and its container must be disposed of in a safe manner (see: Disposal

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

ADG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78

and the IBC Code

15. Regulatory information

Safety, health and environmental regulations

National regulations This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the

preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

International regulations

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Material name: Molylube Synthetic Ester Chain Lubricant 301683 Version #: 2.0 Revision date: 08-18-2017 Print date: 08-18-2017

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

 Issue date
 06-23-2016

 Revision date
 08-18-2017

DisclaimerCalumet Branded Products, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is

product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in

the sheet was written based on the best knowledge and experience currently available.

Revision information Product and Company Identification: Synonyms

Material name: Molylube Synthetic Ester Chain Lubricant
301683 Version #: 2.0 Revision date: 08-18-2017 Print date: 08-18-2017

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).