



SAFETY DATA SHEET

1. Identification

Product identifier Molylube 1% Moly Extreme Pressure Grease LC 460-2
Product Code 301700
SDS number 7325

Other means of identification

Synonyms Old Product Code 27692; For Package Codes 301700XXXXXX
Product Code 301700

Recommended use of the chemical and restrictions on use

Recommended use Lubricating Grease
Restrictions on use 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 hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3

Label elements, including precautionary statements

Hazard symbol(s) None.
Signal word None.
Hazard statement(s) Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention Avoid release to the environment.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification None known.

Supplemental information 65.59% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Zinc, Dithiophosphate Di-c1-14-alkyl Esters	68649-42-3	1 - < 3
Other components below reportable levels		90 - 100

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	Irritation of eyes and mucous membranes. Skin 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	None.
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

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 confined areas. Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

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

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

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Zinc, Dithiophosphate	TWA	2 mg/m3	Inhalable fraction.
Di-c1-14-alkyl Esters (CAS 68649-42-3)		0.1 mg/m3	Respirable fraction.

Biological limit values

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

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

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.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Not available.

Form Liquid. Paste.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range 699.8 °F (371 °C) estimated (Base Oil)

Flash point 559.4 °F (293.0 °C) Pensky-Martens Closed Cup (Base Oil)

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.00001 hPa estimated

Density 905.00 kg/m³

Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Negligible
Solubility (other)	Oil
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	500 °F (260 °C) estimated (Base Oil)
Decomposition temperature	Not available.
Viscosity	480 cSt (Base Oil)
Viscosity temperature	104 °F (40 °C)
Other physical and chemical parameters	
Dropping point	429.8 °F (221 °C)
Explosive properties	Not explosive.
Flash point class	Combustible IIIB
Oxidizing properties	Not oxidizing.
Specific gravity	0.91

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	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

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	Irritation of eyes and mucous membranes. Skin irritation.

Acute toxicity	Not available.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.

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.
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Carcinogenicity	Due to lack of data the classification is not possible.
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Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
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Specific target organ toxicity - single exposure	Not classified.
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Specific target organ toxicity - repeated exposure	Due to lack of data the classification is not possible.
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Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.
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 instructions).
Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is 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 Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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).

Australia Medicines & Poisons Schedule 4

Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3) for human internal use Exception may apply, see the regulation for relevance.

Australia National Pollutant Inventory (NPI): Threshold quantity

Zinc, Dithiophosphate Di-c1-14-alkyl Esters (CAS 68649-42-3) 10 TONNES/YR Threshold Category: 1

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)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes

Country(s) or region	Inventory name	On inventory (yes/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)	Yes
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)

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).

16. Other information

Issue date 12-18-2015

Revision date 04-13-2018

Disclaimer Calumet 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 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: Product and Company Identification
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
GHS: Classification