

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

1. Identification

1.1. Product identifier

Product Identity LS-70LF
Alternate Names LS70LF Kronaplate (Marine Grease) K-70

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.
Application Method See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Lone Star Lubricants
2232 Moneda Street
Fort Worth, TX 76117-5310

Emergency (817) 831-2522
Customer Service: Lone Star Lubricants (817) 831-2522 Fax: (817) 834-0447

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 3;H331 Toxic if inhaled.
Skin Irrit. 3;H316 Causes mild skin irritation. (Not adopted by US OSHA)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H316 Causes mild skin irritation.
H331 Toxic if inhaled.

[Prevention]:

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P271 Use only outdoors or in a well-ventilated area.

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

[Response]:

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P311 Call a POISON CENTER or doctor / physician.

P321 Specific treatment (see information on this label).

P332+313 If skin irritation occurs: Get medical advice / attention.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified CAS Number: 0064742-52-5	10 - 25	Asp. Tox. 1;H304	[1]
Dec-1-ene, homopolymer, hydrogenated CAS Number: 0068037-01-4	10 - 25	Asp. Tox. 1;H304	[1]
Calcium carbonate CAS Number: 0000471-34-1	10 - 25	Not Classified	[1][2]
Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)- CAS Number: 0015337-18-5	10 - 25	Aquatic Chronic 4;H413	[1]
Acetone CAS Number: Proprietary	1.0 - 10	Flam. Liq. 2;H225 Eye Irrit. 2;H319 STOT SE 3;H336	[1][2]
MOLYBDENUM, BIS(DIBUTYLCARBAMODITHIOATO)DI- MU.-OX CAS Number: 0068412-26-0	1.0 - 10	Acute Tox. 2;H330	[1]
Ethylene glycol monobutyl ether CAS Number: 0000111-76-2	1.0 - 10	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Eyes - can cause irritation, redness, blurred vision. Skin - prolonged contact can cause irritation and dermatitis. Ingestion - can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.
Inhalation	Toxic if inhaled.
Skin	Causes mild skin irritation. (Not adopted by US OSHA)

5. Fire-fighting measures

5.1. Extinguishing media

CO₂, Foam, Dry Chemical, or Halon.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Irritating and/or toxic fumes including CO, CO₂, and NO_x may be released.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Wear self-contained breathing apparatus. Do not extinguish with water.

ERG Guide No. ----

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Clean spill with absorbent material

Eliminate ignition sources

Do not store greasy materials in enclosed containers for long periods of time

Wear gloves, goggles and gas mask if TWA's are exceeded.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Protect from physical damage. Store in a cool, dry, ventilated area away from acids, alkalis, and open flames.

Incompatible materials: Strong oxidizing agents and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
Proprietary	Acetone	OSHA	TWA 1000 ppm (2400 mg/m ³) STEL 2400 mg/m ³
		ACGIH	TWA: 500 ppm STEL: 750 ppm
		NIOSH	250 ppm (590 mg/m ³) TWA
		Supplier	No Established Limit
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	TWA 50 ppm (240 mg/m ³) [skin]
		ACGIH	TWA: 20 ppm Revised 2003,
		NIOSH	TWA 5 ppm (24 mg/m ³) [skin]
		Supplier	No Established Limit

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

0000471-34-1	Calcium carbonate	OSHA	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		ACGIH	No Established Limit
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		Supplier	No Established Limit
0015337-18-5	Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0064742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0068037-01-4	Dec-1-ene, homopolymer, hydrogenated	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0068412-26-0	MOLYBDENUM, BIS(DIBUTYLCARBAMODITHIOATO)DI-MU.-OX	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m3 OSHA PEL and 10 mg/m3 ACGIH.

Carcinogen Data

CAS No.	Ingredient	Source	Value
Proprietary	Acetone	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0000471-34-1	Calcium carbonate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0015337-18-5	Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)-	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0064742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0068037-01-4	Dec-1-ene, homopolymer, hydrogenated	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

0068412-26-0	MOLYBDENUM, BIS(DIBUTYLCARBAMODITHIOATO)DI- .MU.-OX	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

- Respiratory** Use NIOSH approved organic respirator if TWA/TLV limits are exceeded.
- Eyes** Wear safety glasses or goggles
- Skin** Chemical resistant gloves
- Engineering Controls** Use to maintain levels below TWA limits. Use non sparking equipment.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Greenish Yellow Grease
Odor	petroleum odor
Odor threshold	Not determined
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	>300F (C.O.C)
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	Not Measured
Solubility in Water	Nil
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Density (lbs/gal)	7.7

9.2. Other information

No other relevant information.

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid open flame.

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

Irritating and/or toxic fumes including CO, CO₂, and NO_x may be released.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5)	> 5,000.00, Rat - Category: NA	No data available	No data available	5.70, Rat - Category: NA	No data available
Dec-1-ene, homopolymer, hydrogenated - (68037-01-4)	> 5,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	No data available	4,800.00, Rat - Category: NA	No data available
Calcium carbonate - (471-34-1)	6,450.00, Rat - Category: NA	No data available	No data available	No data available	No data available
Zinc, bis(dipentylcarbamodithioato-S,S'), (T-4)- - (15337-18-5)	No data available	No data available	No data available	No data available	No data available
Acetone - (Proprietary)	5,800.00, Rat - Category: NA	7,426.00, Guinea Pig - Category: NA	76.00, Rat - Category: NA	50.10, Rat - Category: NA	No data available
MOLYBDENUM, BIS(DIBUTYLCARBAMODITHIOATO)DI-.MU.-OX - (68412-26-0)	No data available	No data available	No data available	No data available	No data available
Ethylene glycol monobutyl ether - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	173.00, Guinea Pig - Category: NA	No data available	No data available

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation	3	Causes mild skin irritation. (Not adopted by US OSHA)
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

Harmful to aquatic life.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5)	5,000.00, Oncorhynchus mykiss	1,000.00, Daphnia magna	1,000.00 (96 hr), Scenedesmus subspicatus
Dec-1-ene, homopolymer, hydrogenated - (68037-01-4)	Not Available	Not Available	Not Available
Calcium carbonate - (471-34-1)	56,000.00, Gambusia affinis	Not Available	Not Available
Zinc, bis(dipentylcarbomodithioato-S,S')-, (T-4)- - (15337-18-5)	Not Available	Not Available	Not Available
Acetone - (Proprietary)	100.00, Pimephales promelas	10.00, Daphnia magna	20.565 (72 hr), Ulva pertusa
MOLYBDENUM, BIS(DIBUTYLCARBAMODITHIOATO)DI-.MU.-OX - (68412-26-0)	Not Available	Not Available	Not Available
Ethylene glycol monobutyl ether - (111-76-2)	220.00, Fish (Piscis)	1,000.00, Daphnia magna	Not Available

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

This product is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore releases to air, land, or water are not reportable under CERCLA ("Superfund"). However, under Section 311 of EPA's Clean Air Water Act (CWA). This product is considered an oil. As such, spills into or leading to surface waters that cause a sheen must be reported to the national response center, 800-424-8802.

This product is an oil under 49 CFR (DOT) part 130. If shipped by rail or highway in a tank with a capacity of 3,500 gallons or more, it is subject to the requirements of part 130. Mixture solutions in which this product is present at 10% or more may also be subject to this rule.

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a "hazardous waste" at the time of disposal.

Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze solder, drill or expose this products empty container to heat, flame or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

14.5. Environmental hazards

IMDG Marine Pollutant: No

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D1B

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs (lbs):

Acetone (5,000.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Ethylene glycol monobutyl ether

Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)-

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Acetone

Dec-1-ene, homopolymer, hydrogenated

Ethylene glycol monobutyl ether

Pennsylvania RTK Substances (>1%):

Acetone

Dec-1-ene, homopolymer, hydrogenated

Ethylene glycol monobutyl ether

Safety Data Sheet

LS-70LF

SDS Revision Date:

07/23/2015

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

H336 May cause drowsiness and dizziness.

H413 May cause long lasting harmful effects to aquatic life.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. Users should make their own investigations to determine the suitability of the information or products for their particular purpose. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

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