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1. Identification

1.1. Product identifier

Product Identity LS-100

Alternate Names Grease, Kronaplate LS-100

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

Intended useSee Technical Data Sheet.Application MethodSee Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Lone Star Lubricants

2232 Moneda St.

Fort Worth, TX 76117-5310

Emergency

24 hour Emergency: Poison Control Telephone: 1-800-222-1222 **Customer Service: Lone Star Lubricants** (817) 831-2522

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

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

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

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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	50 - 75	Asp. Tox. 1;H304	[1]
Alkyl quaternary ammonium bentonite CAS Number: 0068953-58-2	25 - 50	Not Classified	[1]
Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4)- CAS Number: 0015337-18-5	1.0 - 10	Aquatic Chronic 4;H413	[1]
Molybdenum sulfide CAS Number: 0001317-33-5	1.0 – 10	Not Classified	[1]

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 Contact with eyes, prolonged contact with skin may cause irritation.

Inhalation - excessive exposure may irritate eyes, nose, and throat.

Harmful if swallowed.

OTHER HAZARDS: Material may mist when heated.

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.

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5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, halon.

Do not use: water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Irritating and/or toxic fumes including oxides of carbon, sulfur and nitrogen may be released.

5.3. Advice for fire-fighters

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

Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream.

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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

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up.

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into a waste container for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

Dispose of waste in a chemical landfill as approved by current local, state and federal laws and regulations.

7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Strong Oxidizing Agents, Strong Acids and Alkalis.

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

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
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	OSHA	No Established Limit
	naphthenic; Baseoil-unspecified	ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0068953-58-2	Alkyl quaternary ammonium bentonite	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0001317-33-5	Molybdenum sulfide	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
0015337-18-5	Zinc, bis(dipentylcarbamodithioato-	OSHA	Select Carcinogen: No
	S,S')-, (T-4)-	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),	OSHA	Select Carcinogen: No
	hydrotreated heavy naphthenic; Baseoil-unspecified	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		OSHA	Select Carcinogen: No
	bentonite	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001317-33-5 Molybdenum sulfide O		OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

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	Supplier No Established Limit	\neg
- 1		

8.2. Exposure controls

Respiratory Use NIOSH approved organic respirator if TWA/TLV limits are exceeded.

Eyes Wear chemical safety glasses or goggles.

Skin Chemical resistant gloves.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction.

If mechanical, 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 Grey Liquid

Odor Nil

Odor threshold

PH

Not Measured

Flash Point

Sample Samp

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 Not Measured Partition coefficient n-octanol/water (Log Kow) Not Measured **Auto-ignition temperature** Not Measured **Decomposition temperature** Not Measured Viscosity (cSt) Not Measured Density 7.7 (lb/gal)

9.2. Other information

DMSO extract by IP346: Less than 3.0 wt % (mineral oil component only)

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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

Excessive heat and open flame.

10.5. Incompatible materials

Strong Oxidizing Agents, Strong Acids and Alkalis.

10.6. Hazardous decomposition products

Irritating and/or toxic fumes including oxides of carbon, sulfur and nitrogen 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)	No data available	No data available	No data available	No data available	No data available
Alkyl quaternary ammonium bentonite - (68953-58-2)	5,000.00, Rat - Category: 5	No data available	No data available	12.60, Rat - Category: NA	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
Molybdenum sulfide – (1317-33-5)	No data available	No data available	No data available	No data available	No data available

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

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Acute toxicity (inhalation) Not Applicable Skin corrosion/irritation Not Applicable Serious eye damage/irritation Not Applicable Respiratory sensitization Not Applicable Skin 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 STOT-repeated exposure Not Applicable		
Skin corrosion/irritation Not Applicable 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 STOT-repeated exposure Not Applicable	Acute toxicity (dermal)	 Not Applicable
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 STOT-repeated exposure Not Applicable	Acute toxicity (inhalation)	 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 STOT-repeated exposure Not Applicable	Skin corrosion/irritation	 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 STOT-repeated exposure Not Applicable	Serious eye damage/irritation	 Not Applicable
Germ cell mutagenicity Not Applicable Carcinogenicity Not Applicable Reproductive toxicity Not Applicable STOT-single exposure Not Applicable STOT-repeated exposure Not Applicable	Respiratory sensitization	 Not Applicable
Carcinogenicity Not Applicable Reproductive toxicity Not Applicable STOT-single exposure Not Applicable STOT-repeated exposure Not Applicable	Skin sensitization	 Not Applicable
Reproductive toxicity Not Applicable STOT-single exposure Not Applicable STOT-repeated exposure Not Applicable	Germ cell mutagenicity	 Not Applicable
STOT-single exposure Not Applicable STOT-repeated exposure Not Applicable	Carcinogenicity	 Not Applicable
STOT-repeated exposure Not Applicable	Reproductive toxicity	 Not Applicable
	STOT-single exposure	 Not Applicable
Aspiration hazard Not Applicable	STOT-repeated exposure	 Not Applicable
	Aspiration hazard	 Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

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
Alkyl quaternary ammonium bentonite - (68953-58-2)	Not Available	Not Available	Not Available
Zinc, bis(dipentylcarbamodithioato-S,S')-, (T-4) (15337-18-5)	Not Available	Not Available	Not Available
Molybdenum sulfide – (1317-33-5)	Not Available	Not Available	Not Available

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.

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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

Observe all federal, state and local regulations when disposing of this substance.

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent material and residues at the time of disposition.

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
14.5. Environmental hazar	ds		

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.

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Toxic Substance All components of this material are either listed or exempt from listing on the TSCA

Control Act (TSCA) Inventory.

WHMIS Classification Not Regulated

US EPA Tier II Hazards Fire: No

Sudden Release of Pressure: No

Reactive: No Immediate (Acute): No

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

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

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:

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

Proposition 65 - Carcinogens (>0.0%):

Crystalline Silica - Quartz

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%):

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

Pennsylvania RTK Substances (>1%):

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

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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:

H304 May be fatal if swallowed and enters airways.

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.

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