SAFETY DATA SHEET

LS-28 Assembly Lube Grease

Section 1. Identification

GHS product identifier : LS-28 Assembly Lube Grease

Synonyms : Lubricating grease

Supplier's details : Lone Star Lubricants

2232 Moneda St. Fort Worth, TX 76117

Emergency telephone

number

: Technical Contact: (817) 831-2522 Poison Control: (800) 222-1222

(United States Only)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the

safe handling and proper use of the product. This MSDS should be retained and

available for employees and other users of this product.

Classification of the substance or mixture

: Not classified.

GHS label elements



Signal word : Warning

Hazard statements: Injection under the skin can cause severe injury.

Most damage occurs in the first few hours.

Initial symptoms may be minimal.

Precautionary statements

General : Avoid contact with eyes, skin and clothing. May be harmful if swallowed. IF IN EYES:

Rinse cautiously with water for several minutes. IF SWALLOWED: Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of

children.

Prevention : Not applicable.

Response : Not applicable.

Storage : Store in a dry place and/or in closed container. Store in accordance with all local,

regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

: Injection of petroleum hydrocarbons requires immediate medical attention

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of : Lubricating grease

identification LS-28

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Section 3. Composition/information on ingredients

CAS number/other identifiers

CAS number : Not applicable.

Ingredient Name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥25 - ≤50	64742-54-7
Residual oils (petroleum), solvent-dewaxed Distillates	≥10 - ≤25	64742-62-7
(petroleum), hydrotreated heavy naphthenic	≤10	64742-52-5
Molybdenum Disulfide	≥40 - ≤60	

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

There are no 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. Get medical attention if irritation

occurs.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Do not induce vomiting unless directed to do so by medical

personnel. Get medical attention if symptoms occur.

Most important symptoms/effects. acute

Potential acute health effects

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

Skin contact : Injection of pressurized hydrocarbons can cause severe permanent tissue damage.

Initial symptoms may be minor.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, ifnecessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: Treat symptomatically and supportively.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

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Section 5. Fire-fighting measures

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

: None known.

media

Hazardous thermal decomposition products

: No specific data.

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Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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 emergencyprocedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnelfrom entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialised 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".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. 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

Advice on general occupational hygiene : Put on appropriate personal protective equipment (see Section 8).

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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information onhygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Do not apply heat or flame to stockpiled material. Rotate stock to reduce the potential for hot spots. Do not store with oxidizers. Minimize dust creation by keeping material moist and/or covered.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None identified.

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Section 8. Exposure controls/personal protection

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

: Wash hands, forearms and face thoroughly after handling chemical products, before Hygiene measures

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 : Safety glasses equipped with side shields are recommended as minimum protection in

industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Safety glasses withside shields. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required

instead.

Skin protection

Hand protection : Chemical-resistant gloves complying with an approved standard should be worn at all

times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

: Appropriate footwear and any additional skin protection measures should be selected Other skin protection

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if

a risk assessment indicates this is necessary. 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

Physical state : Solid. [Smooth texture]

Color : Gray/black

Odor : Mild petroleum odor

Hq : Not available.

Boiling point : Not available.

: Open cup: >300°C (>572°F) [Estimated] Flash point

: <1 (butyl acetate = 1) **Evaporation rate**

Lower and upper explosive

: Lower: 1% (flammable) limits Upper: 7% : Not available Vapor pressure Vapor density : Not available

Relative density : 1.87

Density Ibs/gal : Estimated 15 lbs/gal

Gravity, °API : Not available

Solubility : Insoluble in the following materials: cold water.

NLGI Grade : 2

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Section 10. Stability and reactivity

Reactivity : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

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 : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary

: Distillates (petroleum), hydrotreated heavy naphthenic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Distillates (petroleum), hydrotreated heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicologicaleffects.

Irritation/Corrosion

Skin : No additional information.Eyes : No additional information.Respiratory : No additional information.

Sensitization

Skin: No additional information.Respiratory: No additional information.

Mutagenicity

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Conclusion/Summary: No additional information.

Carcinogenicity

Conclusion/Summary: No additional information.

Reproductive toxicity

Conclusion/Summary: No additional information.

Teratogenicity

Conclusion/Summary: No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

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Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Routes of entry anticipated: Dermal.

Potential acute health effects

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

Skin contact: Injection of pressurized hydrocarbons can cause severe permanent tissue damage.

Initial symptoms may be minor.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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.

Section 12. Ecological information

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary: Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

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

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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 at all times 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 should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : D018

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmenta I hazards	No.	No.	No.
Additional information	-	-	-

Special precautions foruser : 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

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

Clean Water Act (CWA) 307: Zinc Compounds; lead; Cadmium (Non-pyrophoric); naphthalene; benzene; toluene; ethylbenzene

Clean Water Act (CWA) 311: naphthalene; benzene; toluene; xylene; ethylbenzene This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

SARA 304 RQ : Not applicable.

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Section 15. Regulatory information

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	lead	7439-92-1	trace

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 : None of the components are listed.New York : None of the components are listed.

New Jersey : The following components are listed: Zinc Compound Pennsylvania : The following components are listed: Zinc Compound

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer. **WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
toluene	<0.01	No.	Yes.	No.	7000 µg/day (ingestion)
ethylbenzene	<0.001	Yes.	No.	41 μg/day (ingestion) 54 μg/day (inhalation)	No.
benzene	<0.001	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
naphthalene	<0.0001	Yes.	No.	Yes.	No.
cumene	<0.0001	Yes.	No.	No.	No.
lead	trace	Yes.	Yes.	15 μg/day (ingestion)	Yes.
Cadmium (Non- pyrophoric)	trace	Yes.	Yes.	0.05 μg/day (inhalation)	4.1 μg/day (ingestion)

International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: At least one component is not listed.

Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Canada inventory : All components are listed or exempted.

EU Inventory : At least one component is not listed in EINECS but all such components are listed in

ELINCS.

Please contact your supplier for information on the inventory status of this material.

WHMIS (Canada) : Not controlled under WHMIS (Canada).

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Section 16. Other information

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



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History

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revision

Key to abbreviations : ATE = Acute ToxicityEstimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

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