

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product identifier

Shield Ultra Lithium NLGI-3 Product Name:

Product Type: Liquid

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use of the Substance / Mixture: Grease

For specific application advice see appropriate Technical Data Sheet

or consult our company representative.

1.3 Details of the Supplier of the Safety Data Sheet

Supplier: Phoenix Grease & Lubricants Manufacturing LLC, Plot No. 599 -

1052, Jebel Ali Industrial First, Dubai,

United Arab Emirates

Supplier Phone & Email Address: Phone: +971 6 5522454 Email: info@phoenixlubricants.com

Date of Issue 15-April-2022 Date of Revision 05-May-2022

Prepared by: Phoenix Grease & Lubricants Manufacturing LLC

1.4 Emergency Telephone Number

Emergency Telephone Number: United Arab Emirates, Government of Sharjah, Hamriyah Free Zone

> Authority, SAFETY PH NO. +971 6 5618895 (24x7) EMERGENCY PH NO. +971 6 5618895 (24x7)

SECTION 2: Hazard Identification

2.1 Classification of the Substance / Mixture

Product Definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 Not Classified

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info@ phoenixlubricants.com

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[CLP/GHS]

1999/45/EC [DPD]

Classification according to Directive The product is not classified as dangerous according to Directive

1999/45/EC and its amendments.

See sections 11 and 12 for more detailed information on health

effects and symptoms and environmental hazards.

2.2 Label Elements

Signal Word: No signal word.

Hazard Statements: No known significant effects or critical hazards.

Not applicable.

Precautionary Statements:

Prevention Not applicable. Response Not applicable. Storage Not applicable. Disposal Not applicable. Not applicable. Supplemental Label Elements:

Special Packaging Requirements:

Containers to be fitted

with child-resistant

fastenings

Tactile Warning of Danger: Not applicable.

2.3 Other Hazards

Other Hazards which do not Result in Defatting to the skin. Classification: **USED GREASE**

Used engine oil may contain hazardous components, which have the

potential to cause skin cancer.

See Toxicological Information, section 11 of this Safety Data Sheet.

SECTION 3: Composition/Information on Ingredients

Substance / Mixture: Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Chemically

modified base oil and Proprietary performance additives.

This product does not contain any hazardous ingredients at or above

regulated thresholds.

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SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at

least 15 minutes.

Eye Contact: Eyelids should be held away from the eyeball to ensure thorough

rinsing. Check for and remove any contact lenses. Get medical

attention.

Skin Contact:

Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical

attention if irritation develops.

Ingestion:

Do not induce vomiting unless directed to do so by medical

personnel. Get medical attention if Symptoms occur.

Inhalation:

If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be

kept under medical surveillance for 48 hours.

Protection of First Aiders:

No action shall be taken involving any personal risk or without

suitable training.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

See Section 11 for more detailed information on health effects and

symptoms.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

Notes to Physician: See Section 11 for more detailed information on health effects and

symptoms.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing Media

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Suitable Extinguishing Media In case of fire, use foam, dry chemical or carbon dioxide extinguisher

or spray.

Unsuitable Extinguishing Media Do not use water jet.

5.2 Special Hazards Arising from Substance / Mixture

Hazards from the Substance or

Mixture

In a fire or if heated, a pressure increase will occur and the container

may burst.

Combustion products may include the following: Carbon Oxides

Hazardous Combustion Products (CO, CO2) (carbon monoxide, carbon dioxide)

5.3 Advice for Fire Fighters

Special precautions 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. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for

chemical incidents.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without

suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid

falling. Put on appropriate personal protective equipment.

For emergency responders If specialized 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".

6.2 Environmental Precautions

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Avoid dispersal of spilt 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).

6.3 Methods and Material for Containment and Cleaning Up

Small Spill Stop leak if without risk. Move containers from spill area. Absorb with

an inert material and place in an appropriate waste disposal

container. Dispose of via a licensed waste disposal contractor.

Large Spill Stop leak if without risk. Move containers from spill area. Prevent

entry into sewers, watercourses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Dispose of via a licensed waste disposal contractor.

6.4 Reference to Other Sections

See Section 1 for emergency contact information.

See Section 5 for firefighting measures.

See Section 8 for information on appropriate personal protective

equipment.

See Section 12 for environmental precautions.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Protective measures Put on appropriate personal protective equipment.

Advice on general occupational

hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep away from heat and direct sunlight. Keep container tightly

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closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabeled containers.

7.3 Specific and End Use(s) Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Occupational Exposure Limits

No exposure limit value known measures.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Recommended Monitoring Procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level No DNELs/DMELs available

Predicted No Effect Concentration No PNECs available.

8.2 Exposure Controls

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Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organization for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures
Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory Measures

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure. In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye / Self Protection

Safety glasses with side shades

Skin Protection
Hand Protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures). Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

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Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes must be determined and rigorously followed.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks.

For Example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and Body:

Use of protective clothing is good industrial practice. 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. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Refer to Standards



Respiratory protection: EN529

Gloves: EN420, EN374 Eye protection: EN166

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, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance

Physical State Gel

Color Light Brown
Odour Typical Petroleum
Odour threshold Not Available
pH Not Available

Worked Penetration 235
Dropping point 190°C

Pour point Not Available
Flash point Not Available
Evaporation rate Not Available
Flammability (solid, gas) Not Available
Upper/lower flammability or Not Available

explosive limits

Vapor pressure Not Available Not Available Vapor density Relative density Not Available SP. Gravity @15°C/60°F Not Available Solubility Insoluble in water. Partition coefficient: Not Available Auto-ignition temperature Not Available Decomposition temperature Not Available Viscosity Not Available Explosive properties Not Available Oxidizing properties Not Available

9.2 Other Information

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SECTION 10: Stability and Reactivity

10.1 Reactivity

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

10.2Chemical Stability

This product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

10.4Conditions to Avoid

Avoid all possible sources of ignition (spark or flame).

10.5Incompatible Materials

Reactive or incompatible with Oxidizing Materials

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.2Information on Toxicological Effects

Acute Toxicity EstimatesRouteATE ValuePetroleum derived calcium saltOral> 5000mg/kg61789-86-4Dermal> 4000 mg/kg

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Inhalation (dusts and mists) 418.6 mg/l

Information on the likely routes of

exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential Acute Health Effects

Inhalation Exposure to decomposition products may cause a health hazard.

Serious effects may be delayed following exposure.

Ingestion No known significant effects or critical hazards.

Skin Contact Defatting to the skin. May cause skin dryness and irritation.

Eye Contact No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological

characteristics

No specific data

Inhalation

No specific data

Ingestion

Adverse symptoms may include irritation, dryness, cracking

Skin Contact

No specific data

Eye Contact

Over exposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Delayed and immediate effects and also chronic effects from short and lon

also chronic effects from short and lone term exposure

Inhalation/Ingestion

Skin Contact

Ingestion of large quantities may cause nausea and diarrhea.

Prolonged or repeated contact can defat the skin and lead to

irritation and/or dermatitis.

Potential risk of transient stinging or redness if accidental eye

Potential Chronic Health Effects

contact occurs.

Used Engine Oils:

General Combustion products resulting from the operation of internal

combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components, which have the

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potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.

No know significant effects or critical hazards.

Carcinogenicity

No know significant effects or critical hazards.

Mutagenicity

No know significant effects or critical hazards.

Developmental Effects

No know significant effects or critical hazards.

Fertility Effects

SECTION 12: Ecological Information

12.1Toxicity

Environmental Hazard Not classified as dangerous.

12.2Persistence and Degradability

Partially biodegradable.

12.3Bio Accumulative Potential

This product is not expected to bio accumulate through food chains

in the environment.

12.4Mobility in Soil

Soil / Water partition coefficient

Not available

(KOC)

Mobility

Spillages may penetrate the soil causing ground water

contamination

12.5Result of PBT and vPVB Assessment

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PBT Not applicable

vPVB Not applicable

12.60ther Adverse Effects

Other ecological information Spills may form a film on water surfaces causing physical damage to

organisms. Oxygen transfer could also be impaired.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Methods of Disposal Where possible, arrange for product to be recycled. Dispose of via

an authorized person/ licensed waste disposal contractor in

accordance with local regulations.

Waste Code Waste Designation

13 02 08* Other engine, gear, and

lubricating oils

However, deviation from the intended use and/or the presence of an potential contaminants may require an alternative waste

disposal code to be assigned by the end user.

Packing

Methods of Disposal Where possible, arrange for product to be recycled. Dispose of via

an authorized person/ licensed waste disposal contractor in

accordance with local regulations.

Special Precautions 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 spilt material and runoff and contact with soil,

waterways, drains and sewers.

SECTION 14: Transport Information

	ADR/RID	ADN	IMDG	IATA
14.1 UN Number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN Proper Shipping Name	-	-	-	-
14.3 Transport Hazard Class	-	-	-	-

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14.4 Packing Group - - - -

14.5 Environmental Hazards NO No No No

Additional Information - - - - -

14.6 Special Precautions for

Not available

SECTION 15: Regulatory Information

15.1Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization
None of the components are listed

Substances of very high concern

Annex XVII - Restrictions on the manufacturer, placing on the market and use of certain dangerous substances, mixtures and articles.

Not applicable

Other Regulations

REACH Status

The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States Inventory (TSCA 8b) Australia Inventory (AICS) Canada Inventory China Inventory (IECSC) Japan Inventory (ENCS) Korea Inventory (KECI) All components are listed or exempted.
At least one component is not listed.

15.2Chemical Safety Assessment

Philippines Inventory (PICCS)

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other Information

Abbreviations and Acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland

Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

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PHOENIX

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BCF = Bio Concentration Factor

CAS = Chemical Abstracts Service

CLP = Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DPD = Dangerous Preparations Directive [1999/45/EC]

DSD = Dangerous Substances Directive [67/548/EEC]

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labeling 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)

OECD = Organization for Economic Co-operation and Development

PBT = Persistent, Bio Accumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SADT = Self-Accelerating Decomposition Temperature

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bio Accumulative

Full text of abbreviated H H 304 May be fatal if swallowed and

statements

enters airways.

H 413

May cause long lasting harmful

effects to aquatic life.

Full text of classifications

[CLP/GHS] Aquatic Chronic 4, H413

AQUATIC LONG-TERM

Asp. Tox. 1, H304 HAZARD - Category 4

> **ASPIRATION HAZARD**

Category 1

Full text of abbreviated R Phrases R53- May cause long-term adverse effects in the aquatic

environment.

Full text of classifications [DSD/DPD

Not Applicable

History

Date of Issue

Date of Revision 15/04/2022 Prepared by 05/05/2022

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Petroleum Technology FZC

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