

LE4072 H1 Quincal Syn FG Grease

Lubrication Engineers NZ Ltd

Chemwatch Hazard Alert Code: 1

Chemwatch: 66-9323

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Safety Data Sheet according to HSNO Regulations

S.GHS.NZLEN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| | |
|--------------------------------------|---------------------------------|
| Product name | LE4072 H1 Quincal Syn FG Grease |
| Synonyms | Not Available |
| Other means of identification | Not Available |

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

| | |
|---------------------------------|---|
| Relevant identified uses | Use according to manufacturer's directions. Lubricant; not for consumer use. |
|---------------------------------|---|

Details of the supplier of the safety data sheet

| | |
|--------------------------------|---|
| Registered company name | Lubrication Engineers NZ Ltd |
| Address | 11F Piermark Drive North Harbour Industrial Estate Albany, Auckland New Zealand |
| Telephone | +64 09 415 9411 |
| Fax | +64 09 4158411 |
| Website | Not Available |
| Email | Not Available |

Emergency telephone number

| | |
|--|----------------|
| Association / Organisation | Not Available |
| Emergency telephone numbers | +64 21 3385487 |
| Other emergency telephone numbers | Not Available |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

CHEMWATCH HAZARD RATINGS

| | Min | Max |
|--------------|-----|-----|
| Flammability | 1 | 2 |
| Toxicity | 0 | 1 |
| Body Contact | 1 | 2 |
| Reactivity | 1 | 2 |
| Chronic | 0 | 1 |

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

| | |
|--------------------------------------|---|
| Classification ^[1] | Skin Corrosion/Irritation Category 3, Eye Irritation Category 2B |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

Determined by
Chemwatch using
GHS/HSNO criteria

6.3B, 6.4A (mild)

Label elements

Hazard pictogram(s) Not Applicable

SIGNAL WORD **WARNING**

Hazard statement(s)

H316 Causes mild skin irritation

H320 Causes eye irritation.

Precautionary statement(s) Prevention

P264 Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|--|
| Not Available | <3 | DSMO extractable material |
| | balance | Ingredients determined not to be hazardous |

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

| | |
|---------------------|---|
| Eye Contact | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary. |
| Ingestion | <ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Continued...

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Water spray or fog.
- ▶ Alcohol stable foam.
- ▶ Dry chemical powder.
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

| | |
|-----------------------------|--|
| Fire Incompatibility | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|--|

Advice for firefighters

| | |
|------------------------------|--|
| Fire Fighting | <ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water courses. ▶ Use water delivered as a fine spray to control fire and cool adjacent area. |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). <p>Combustion products include:</p> <ul style="list-style-type: none"> , carbon dioxide (CO₂) , other pyrolysis products typical of burning organic material. <p>May emit corrosive fumes.</p> <ul style="list-style-type: none"> , carbon monoxide (CO) |

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

| | |
|---------------------|---|
| Minor Spills | <ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid contact with skin and eyes. ▶ Wear impervious gloves and safety goggles. ▶ Trowel up/scrape up. |
| Major Spills | <p>Minor hazard.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Control personal contact with the substance, by using protective equipment as required. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------|--|
| Safe handling | <ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps. |
| Other information | <ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed. ▶ Store in a cool, dry, well-ventilated area. ▶ Store away from incompatible materials and foodstuff containers. |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|--|
| Suitable container | <ul style="list-style-type: none"> ▶ Metal can or drum ▶ Packaging as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks. |
| Storage incompatibility | <ul style="list-style-type: none"> ▶ Avoid reaction with oxidising agents ▶ Avoid strong acids, bases. |



+ X + O X + +

X — Must not be stored together

O — May be stored together with specific preventions

+ — May be stored together

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|---------------------------------|---------------|---------------|---------------|---------------|
| LE4072 H1 Quincal Syn FG Grease | Not Available | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|---------------------------|---------------|---------------|
| DSMO extractable material | Not Available | Not Available |

Exposure controls

| | |
|---|--|
| Appropriate engineering controls | <p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p> |
| Personal protection | |
| Eye and face protection | <ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ Chemical goggles. ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. |
| Skin protection | See Hand protection below |
| Hands/feet protection | <ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber |
| Body protection | See Other protection below |
| Other protection | <ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C. apron. ▶ Barrier cream. |
| Thermal hazards | Not Available |

Respiratory protection

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|---|---|--|----------------|
| Appearance | Beige paste with a hydrocarbon-like odour; not miscible with water. | | |
| Physical state | Non Slump Paste | Relative density (Water = 1) | 0.95 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | 6-8 | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Applicable |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | 252 | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Applicable | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | <1 | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| Reactivity | See section 7 |
| Chemical stability | Product is considered stable and hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

| | | |
|--|--|------------------------------------|
| Inhaled | There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. | |
| Ingestion | The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. | |
| Skin Contact | There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. | |
| Eye | There is some evidence to suggest that this material can cause eye irritation and damage in some persons. | |
| Chronic | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. | |
| LE4072 H1 Quincal Syn FG Grease | TOXICITY Not Available | IRRITATION Not Available |

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

| | | | |
|-----------------------------------|---|--------------------------|---|
| Acute Toxicity | ⊘ | Carcinogenicity | ⊘ |
| Skin Irritation/Corrosion | ✓ | Reproductivity | ⊘ |
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | ⊘ |
| Respiratory or Skin sensitisation | ⊘ | STOT - Repeated Exposure | ⊘ |
| Mutagenicity | ⊘ | Aspiration Hazard | ⊘ |

Legend: ✗ – Data available but does not fill the criteria for classification
 ✓ – Data available to make classification
 ⊘ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| LE4072 H1 Quincal Syn FG Grease | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---------------------------------|---------------|--------------------|---------------|---------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|---------------------------------------|---------------------------------------|
| | No Data available for all ingredients | No Data available for all ingredients |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|---------------------------------------|
| | No Data available for all ingredients |

Mobility in soil

| Ingredient | Mobility |
|------------|---------------------------------------|
| | No Data available for all ingredients |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------------|---|
| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ Recycle wherever possible or consult manufacturer for recycling options. ▶ Consult State Land Waste Authority for disposal. ▶ Bury or incinerate residue at an approved site. ▶ Recycle containers if possible, or dispose of in an authorised landfill. |
|-------------------------------------|---|

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

| | |
|------------------|----------------|
| Marine Pollutant | NO |
| HAZCHEM | Not Applicable |

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

This substance is to be managed using the conditions specified in an applicable Group Standard

| HSR Number | Group Standard |
|------------|--|
| HSR002624 | N.O.S. (Subsidiary Hazard) Group Standard 2006 |
| HSR002535 | Compressed Gas Mixtures (Subsidiary Hazard) Group Standard 2006 |
| HSR002596 | Laboratory Chemicals and Reagent Kits Group Standard 2006 |
| HSR002530 | Cleaning Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002585 | Fuel Additives (Subsidiary Hazard) Group Standard 2006 |
| HSR002519 | Aerosols (Subsidiary Hazard) Group Standard 2006 |
| HSR002521 | Animal Nutritional and Animal Care Products Group Standard 2006 |
| HSR002606 | Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2006 |
| HSR002644 | Polymers (Subsidiary Hazard) Group Standard 2006 |
| HSR002647 | Reagent Kits Group Standard 2006 |
| HSR002612 | Metal Industry Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002670 | Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006 |
| HSR002503 | Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006 |
| HSR002638 | Photographic Chemicals (Subsidiary Hazard) Group Standard 2006 |
| HSR002565 | Embalming Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002578 | Food Additives and Fragrance Materials (Subsidiary Hazard) Group Standard 2006 |
| HSR002558 | Dental Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002684 | Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2006 |
| HSR002573 | Fire Fighting Chemicals Group Standard 2006 |
| HSR100425 | Pharmaceutical Active Ingredients Group Standard 2010 |
| HSR002600 | Leather and Textile Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002605 | Lubricants (Low Hazard) Group Standard 2006 |
| HSR002571 | Fertilisers (Subsidiary Hazard) Group Standard 2006 |
| HSR002648 | Refining Catalysts Group Standard 2006 |
| HSR002653 | Solvents (Subsidiary Hazard) Group Standard 2006 |
| HSR002544 | Construction Products (Subsidiary Hazard) Group Standard 2006 |
| HSR002549 | Corrosion Inhibitors (Subsidiary Hazard) Group Standard 2006 |
| HSR002552 | Cosmetic Products Group Standard 2006 |
| HSR100757 | Veterinary Medicine (Limited Pack Size, Finished Dose) Standard 2012 |
| HSR100758 | Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2012 |
| HSR100628 | Straight-chained Lepidopteran Sex Pheromone Group Standard 2012 |
| HSR100580 | Tattoo and Permanent Makeup Substances Group Standard 2011 |

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

| Hazard Class | Quantity beyond which controls apply for closed containers | Quantity beyond which controls apply when use occurring in open containers |
|----------------|--|--|
| Not Applicable | Not Applicable | Not Applicable |

Approved Handler

Continued...

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

| Class of substance | Quantities |
|--------------------|----------------|
| Not Applicable | Not Applicable |

Refer Group Standards for further information

Tracking Requirements

Not Applicable

| National Inventory | Status |
|-------------------------------|--|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | Y |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | Y |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Y |
| Legend: | Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average
 PC—STEL: Permissible Concentration-Short Term Exposure Limit
 IARC: International Agency for Research on Cancer
 ACGIH: American Conference of Governmental Industrial Hygienists
 STEL: Short Term Exposure Limit
 TEEL: Temporary Emergency Exposure Limit,
 IDLH: Immediately Dangerous to Life or Health Concentrations
 OSF: Odour Safety Factor
 NOAEL :No Observed Adverse Effect Level
 LOAEL: Lowest Observed Adverse Effect Level
 TLV: Threshold Limit Value
 LOD: Limit Of Detection
 OTV: Odour Threshold Value
 BCF: BioConcentration Factors
 BEI: Biological Exposure Index

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