1. Identification of Substance & Company

Company Details:
Hilti (New Zealand) Ltd
Unit 1/B, 525 Great South Rd
Penrose
Auckland, 1061
PO Box 112- 030, Penrose
Ph 09 526 7783 (between 7-30 AM and 6-30 PM)
EMERGENCY TELEPHONE NUMBER
0800 623 000 (National Poisons Centre)

Product

Product name	Grease
Other names	Grease M32-82
HSNO approval	NA, non hazardous
Approval description	non hazardous
UN number	NA
Proper Shipping Name	NA
Packaging group	NA
Hazchem code	1T (recommended)
Uses	Special lubricant for insert tool connection end

2. Hazard Identification

Approval

This product is not considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).

Classes

NA

Hazard Statements

SYMBOLS
NA

Other Classifications

There are no other Classifications that are known to apply.

Precautionary Statements

none

3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (%)
non hazardous ingredients – combination of biodegradable ester oils, lithium and calcium soap and additives.	proprietary	non hazardous	100%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is recommended. Accessible eyewash is recommended.

Exposure

Swallowed	Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Skin contact	This product is not considered irritating to skin. However there are risks involved with repeated or prolonged sking contact. Gloves should be used in such circumstances.
Inhaled	Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing,

dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor

Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards:	There are no specific risks for fire/explosion for this chemical.
Suitable extinguishing substances:	Dry chemical powder, carbon dioxide or foam.
Unsuitable extinguishing substances:	Do not use water jets. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Products of combustion:	Toxic or irritating fumes, including carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of nitrogen and smoke. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
Protective equipment:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Hazchem code:	2T (recommended)

6. Accidental Release Measures

Containment	The is no current legal requirement for secondary containment of this product. Emergency plans to manage any potential spill must be in place. Prevent spillage from spreading or entering soil, waterways or drains.
Emergency procedures	The container size will generally prevent a major spill. If a significant spill occurs: Remove all sources of ignition. Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).
Clean-up method	Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard.
Disposal	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
Precautions	No special protective clothing is normally necessary. Material can create slippery conditions. In case of spills, beware of slippery floors and surfaces.

7. Storage & Handling

Storage	Avoid storage of harmful substances with food. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.
Handling	Keep exposure to a minimum, and minimise the quantities kept in work areas. Avoid prolonged or repeated skin contact. Ensure that hands are washed after use. Use in ventilated areas – avoid build up of mist. Static electricity and formation of sparks must be prevented. All equipment used when handling the product must be grounded. See section 8 with regard to personal protective equipment requirements.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m^3 for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	non hazardous ingredients	No data	No data

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE).

Personal Protective Equipment

Eyes	Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if splashes are likely.
Skin	Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time. Butyl Rubber gloves are recommended. Nitrile or NBR gloves are suitable for short periods of contact.
Respiratory	Respirator is not required under normal use. Ensure adequate natural ventilation. If product is being used in confined conditions, the use of a mask or respirator may be preferred.

9. Physical & Chemical Properties

Appearance	light brownish pastry
Odour	weak odour
pH	not applicable
Vapour pressure	low
Viscocity	130 mm^2/s (at 40°C DIN 51562)
Boiling point	>300°C (DIN 51356)
Volatile materials	not available
Freezing / melting point	not available
Solubility	Insoluble in water
Specific gravity / density	0.95 at 20°C
Flash point	~240°C
Danger of explosion	Not explosive. Combustible. This material will burn if contact with fire.
Auto-ignition temperature	>300°C
Upper & lower flammable limits	not available
Corrosiveness	not available

10. Stability & Reactivity

Stability	Stable under normal temperature and conditions. All grease components show a very low level of reactivity at room temperature.
Conditions to be avoided	Containers should be kept closed in order to avoid contamination. Keep heat, direct sunlight, open flames or other sources of ignition.
Incompatible groups	Strong oxidising agents
Substance Specific Incompatibility	none known
Hazardous decomposition products	None known
Hazardous reactions	None known

11. Toxicological Information

Summary

IF SWALLOWED: for small amounts no effects are anticipated. Swallowing large amounts ingestion may cause irritation, nausea, vomiting and diarrhoea.
IF IN EYES: may cause mild transient irritation.
IF ON SKIN: transient redness and itchiness is possible.Frequent/ongoing exposure to the skin may contribute to development/exacerbation of dermatitis.

Supporting Data

Acute	**Oral**	This product is not harmful by ingestion. Similar products tested have recorded LD_{50}>5,000 mg/kg.
	Dermal	No evidence of dermal toxicity for this product.
	Inhaled	No evidence of inhalation toxicity for this product.
	Eye	The mixture is not considered to be an eye irritant under HSNO. Direct contact with the dye may cause redness, stinging and lachrymation.
	Skin	The mixture is not considered to be a skin irritant under HSNO. However, transient redness and itchiness is possible. Frequent/ongoing exposure to the skin may contribute to development/exacerbation of dermatitis
Chronic	**Sensitisation**	No ingredient present at concentrations > 0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations > 0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations > 0.1% is considered a carcinogen.
	Reproductive / Developmental	No ingredient present at concentrations > 0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	No ingredient present at concentrations > 1% is considered a target organ toxicant.
	Aggravation of existing conditions	Dermatitis may be aggravated.

12. Ecological Data

Summary
This substance is not considered ecotoxic.

Supporting Data

Aquatic	No evidence of ecotoxicity in the aquatic environment
Bioaccumulation	No data available
Degradability	Considered biodegradable (>70% in 21 days OECD method 301)
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	This product is not considered toxic to terrestrial vertebrates. No LC_{50} (diet) data for ingredients are available and the classification is based on the LD_{50} (oral) – see section 11 – oral toxicity.
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates
Biocidal	Not intended for biocidal action
Environmental effect levels	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
Contaminated packaging	Rinse containers with water before disposal. Preferably re-cycle container, otherwise send to landfill or similar.

14. Transport Information

Land Transport Rule: Dangerous Goods 2005 - NZS 5433:2007
This mixture is not considered a hazardous substance for transport on land.

UN number:	NA	**Proper shipping name:**	NA
Class(es)	NA	**Packing group:**	NA
Precautions:	NA	**Hazchem code:**	NA

IMDG
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN number:	NA	**Proper shipping name:**	NA
Class(es)	NA	**Packing group:**	NA
Precautions:	NA	**EmS**	NA

IATA
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN number:	NA	**Proper shipping name:**	NA
Class(es)	NA	**Packing group:**	NA
Precautions:	NA		

15. Regulatory Information
This product is not considered to be a hazardous substance to the Hazardous Substances and New Organisms Act (HSNO).

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

No workplace controls apply to this product (non hazardous).

Other Legislation
In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

Approval Code	Not applicable – non hazardous under HSNO. Controls, EPA. www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
Ceiling	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
Controls Matrix	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
EC_{50}	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
ERMA	Environmental Risk Management Authority (now EPA)
EPA	Environmental Protection Agency (previously known as ERMA)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD_{50}	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC_{50}	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
EPA Transfer Gazettes	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
Controls Matrix	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2013	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz.
Other References:	Suppliers SDS

Review

Date	Reason for review
December 2011	DRAFT SDS generated (to be reviewed)
January 2012	Reviewed (Hilti). Alternative names, address updated. SDS finalised.
November 2014	Update, review of classes for ingredients. Review of toxicological data, formatting. DoL to WorkSafe, including IATA and IMDG information.

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: ***(09) 940 30 80.***

Datachem