

Safety Data Sheet



Section 1 - Identification of the Material and Supplier

Product Name: LHM Plus
Product Code: 529
Product Use: Hydraulic Oil; Brake Fluid
Supplier: Oil Intel Limited
56 Whakatu Road, Whakatu
Hastings 4172
NEW ZEALAND
Phone: +64 (06) 871 53 25
Fax: +64 (06) 870 48 90

EMERGENCY TELEPHONE NUMBER: 0800 734 607 (New Zealand)
Chemical Nature: Contains hydrocarbons, C₁₃₋₁₆, n-alkanes, isoalkanes, cyclics, <0.03% aromatics.
Creation Date: December 2013
This Version Issued: July 2018 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Non-Hazardous according to the criteria of SWA. Not a Dangerous Good under the ADG Code.

Risk Phrases: R52/53. Harmful to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Safety Phrases: S23, S25, S61. Do not breathe mists. Avoid contact with eyes. Avoid release into the environment.

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.

UN Number: None allocated.

Potential Health Effects

May cause allergic reactions. Inhalation

- **Short Term Exposure:** Available data indicates that this product is not harmful. In addition product is unlikely to cause any discomfort or irritation. Inhalation of high concentration of aerosols may cause mild irritation of the throat.
- **Long Term Exposure:** No data for health effects associated with long term inhalation.

Skin Contact

- **Short Term Exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. In addition, product is unlikely to cause any discomfort in normal use.
- **Long Term Exposure:** Oil blisters may develop following prolonged and repeated exposure through contact with stained clothing.

Eye Contact

- **Short Term Exposure:** This product may be mildly irritating to eyes, but is unlikely to cause anything more than mild discomfort which should disappear once product is removed.
- **Long Term Exposure:** No data for health effects associated with long term eye exposure.

Ingestion

- **Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.
- **Long Term Exposure:** No data for health effects associated with long term ingestion.

Carcinogen Status:

- **SWA:** No significant ingredient is classified as carcinogenic by SWA.
- **NTP:** No significant ingredient is classified as carcinogenic by NTP.
- **IARC:** No significant ingredient is classified as carcinogenic by IARC.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Hydrocarbons, C ₁₃₋₁₆ , n-alkanes, isoalkanes, not set <50 not set not set Oil, white mineral (petroleum) not set			cyclics, <0.03% aromatics 8042-47-5 <10	5 (mist)
2,6-di-tert-butylphenol	128-39-2	<0.6	not set	not set
Tricresylphosphate	1330-78-5	<0.2	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 in New Zealand and is available at all times. Have this MSDS with you when you call.

Inhalation: First aid is not generally required. However, if in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Gently blot away excess liquid. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until the product is removed.

Eye Contact: Quickly and gently blot material from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

Section 5 - Fire Fighting Measures

Fire & Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. This product is classified as a C1 combustible product. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits, and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product are likely to be irritating if inhaled.

Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical, foam and water fog.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flashpoint: 105°C (ASTM D 93)

Upper Flammability Limit: No data

Lower Flammability Limit: No data

Autoignition Temperature: No data

Flammability Class: C1

Section 6 - Accidental Release Measures

Accidental Release: Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include nitrile and neoprene. Eye/face protective equipment should be worn, protective glasses are a minimum or preferably goggles. If there is a significant chance that vapours or mists are likely to build up in the clean-up area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Stop leak if safe to do so, and contain spill. Absorb into sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Can be slippery on floors, especially when wet. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature or contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under 'storage' should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Note that this product is combustible and therefore, for storage, meets the definition of Dangerous Goods in some states. If you store large quantities (tonnes) of such products, we suggest that you consult your region's Dangerous Goods authority in order to clarify your obligations regarding their storage. Store packages of this product in a cool, well-ventilated area. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed as 'incompatible' in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging – there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

Respiratory Equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501** set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS221**

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Oil, mineral	5 (mist)	not set

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well-ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Eye protection is not normally necessary when this product is used. However, if in doubt, wear suitable protective glasses or goggles.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you avoid contact with all chemical products as much as possible and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

Protective Material Types: We suggest that protective clothing be made from the following materials; nitrile and neoprene.

Respirator: Usually no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Section 9 - Physical and Chemical Properties:

Physical Description & Colour:	Fluorescent yellow-green liquid
Odour:	No data
Boiling Point:	Not available
Volatiles:	Nil at 100°C
Vapour Pressure:	Nil at normal ambient temperatures.
Vapour Density:	No data
Specific Gravity:	0.845 at 15°C
Water Solubility:	Negligible at 20°C
pH:	No data
Volatility:	Nil at normal ambient temperatures.
Odour Threshold:	No data
Evaporation Rate:	No data
Coeff Oil/Water Distribution:	No data
Autoignition Temperature:	No data
Kinematic Viscosity:	18mm ² /s at 40°C

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry.

Incompatible Materials: Strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide. Incomplete combustion may produce carbon monoxide, various hydrocarbons, aldehydes and smoke. Water is also formed along with small quantities of oxides of phosphorus. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Skin Contact: Characteristic skin lesions (pimples) may develop following prolonged and repeated exposure through contact with stained clothing.

Sensitization: To our knowledge, the product does not cause aggravated sensitivity.

Carcinogenicity: This product is not classified as carcinogenic. During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

Hazardous Ingredients:

Hydrocarbons, C₁₃₋₁₆, n-alkanes, isoalkanes, cyclics, <0.03% aromatics:

- LD₅₀ >5000mg/kg bw (Rat – OECD 401) ORAL
- LD₅₀ (24h) >3160mg/kg bw (Rabbit – OECD 402) DERMAL
- LD₅₀ (4h) >5266mg/m³ (Rat – OECD 403) INHALATION Oil, white mineral (petroleum):
- LD₅₀ >5000mg/kg (Rat) ORAL 2,6-di-tert-butylphenol:
- LD₅₀ >5000mg/kg (Rat) ORAL

- LD₅₀ (24h) 10,000mg/kg (Rabbit) DERMAL Tricresylphosphate:
- LD₅₀ 3g/kg (Rat)

Special Effects: This product is not classified as mutagenic nor does it contain any known or suspected reproductive hazards.

Section 12 - Ecological Information

Ecotoxicology: Harmful to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Acute Aquatic Toxicity Component:

Hydrocarbons, C₁₃₋₁₆, n-alkanes, isoalkanes, cyclics, <0.03% aromatics:

- ErL₅₀ (72h) (*Skeletonema costatum* – ISO 10253) >10,000mg/L
- LL₅₀ (48h) (*Acartia tonsa* – ISO 14669) >3193mg/L
- LL₅₀ (96h) (*Scopthalmus maximus* – OECD 203) >1028mg/L Oil, white mineral (petroleum):
- LC₅₀ (96h) (*Lepomis macrochirus*) >10,000mg/L 2,6-di-tert-butylphenol:
- EC₅₀ (48h) (*Daphnia magna*) 0.45mg/L Tricresylphosphate:
- LC₅₀ (96h) (*Oryzias latipes*) (semi-static) <3.2-<10mg/L
- LC₅₀ (96h) (*Oncorhynchus mykiss*) (flow-through) 0.21-0.32mg/L
- LC₅₀ (96h) (*Oncorhynchus mykiss*) (static) 3.3-6.2mg/L
- LC₅₀ (96h) (*Lepomis macrochirus*) (flow-through) 0.1-0.22mg/L
- LC₅₀ (96h) (*Poecilia reticulata*) (semi-static) 4.8-6.4mg/L
- LC₅₀ (96h) (*Lepomis macrochirus*) (static) 20.4-41.2mg/L

Mobility:

- **Air:** There is a slow loss by evaporation.
- **Soil:** Given its physical and chemical characteristics, the product generally shows low soil mobility.
- **Water:** The product is insoluble; it spreads on the surface of the water.

Section 13 - Disposal Considerations

Disposal: This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. If neither of these options is suitable, consider controlled incineration, or landfill.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

New Zealand Regulatory Information:

HSNO Approval Number HSR002605

HSNO Group Standard Lubricants (Low Hazard) Group Standard 2006

HSNO Classification 6.3 - SKIN IRRITATION - Category B
 6.4 - EYE IRRITATION - Category A (Irritant)
 9.1 - AQUATIC ECOTOXICITY - Category D

Regulation according to other foreign laws: AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer

NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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