Safety Data Sheet

Section 1 - Identification of The Material and Supplier

Product Name: **ChainLub (Spray)**

Product Code: 04Q

Product Use: Lubricant for various applications.

Supplier: **Total Oil Australia Pty Ltd (ABN 15 149 501 922)**
Suite 2, 415 Riversdale Road, Hawthorn East
Victoria 3123
AUSTRALIA
Phone: +61 (03)9861 8600
Fax: +61 (03) 9882 0447

EMERGENCY TELEPHONE NUMBER (CHEMTREC): **+61 2 9037 2994 (Australia), +64 9 801 0034 (New Zealand)**

Chemical nature: Blend of ingredients presented as an aerosol.

Creation Date: **February, 2013**

This version issued: **April, 2015** and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Xi, Irritating. F, Flammable. Hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

Risk Phrases: R10, R38, R66, R67, R51/53. Flammable. Irritating to skin. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

Safety Phrases: S2, S16, S23, S29, S37, S51, S61, S24/25. Keep out of reach of children. Keep away from sources of ignition - No smoking. Do not breathe vapours or spray. Do not empty into drains. Wear suitable gloves. Use only in well ventilated areas. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes.

SUSMP Classification: None allocated.

ADG Classification: Class 2.1: Flammable gases.

UN Number: 1950, AEROSOLS



GHS Signal word: WARNING

HAZARD STATEMENT:

H223: Flammable material.
H226: Flammable liquid and vapour.
H280: Contains gas under pressure; may explode if heated.
AUH066: Repeated exposure may cause skin dryness or cracking.
H315: Causes skin irritation.
H411: Toxic to aquatic life with long lasting effects.

PREVENTION

P102: Keep out of reach of children.
P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P211: Do not spray on an open flame or other ignition source.
P243: Take precautionary measures against static discharge.
P251: Pressurized container: Do not pierce or burn, even after use.

P264: Wash contacted areas thoroughly after handling.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P362: Take off contaminated clothing and wash before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P332+P313: If skin irritation occurs: Get medical advice.
P372: Explosion risk in case of fire.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam. Water fog or fine spray is the preferred medium for large fires.

STORAGE

P403+P235: Store in a well-ventilated place. Keep cool.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C.

DISPOSAL

P501: Dispose of contents and containers to landfill.

Emergency Overview

Physical Description & Colour: Yellow liquid.
Odour: Slight odour.
Major Health Hazards: vapours may cause drowsiness and dizziness.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.
Long Term Exposure: Repeated exposure may cause skin dryness or cracking.

Eye Contact:

Short Term Exposure: If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.
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 is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.
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)
Kerosene (petroleum), hydrodesulfurized	64742-81-0	<40	not set	not set
Hydrocarbons, C_9-C_{12}		<22	not set	not set
Poly(oxy-1,2-ethanediyl).alpha.-hydro-.omega.-hydroxy-, mono-C_{12-14}-alkyl ethers, phosphates				
	68511-37-5	<1	not set	not set
Tetrafluoroethane	811-97-2		4240	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 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
Skin Contact: Gently blot away excess liquid. Flush with lukewarm, gently flowing water for 5 minutes or until 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 and 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 flammable. There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.
Fire decomposition products from this product are likely to be irritating if inhaled.
Extinguishing Media: Suitable extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.
Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus. Cool closed, undamaged containers exposed to fire with water spray.

Flash point:	>56°C
Upper Flammability Limit:	Not available
Lower Flammability Limit:	Not available
Autoignition temperature:	No data.
Flammability Class:	Flammable Category 3 (GHS); Flammable (AS1940)

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

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: Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers and valves periodically for leaks. If you keep more than 25kg of flammable gases, you are probably required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

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/NZS2210**.

SWA Exposure Limits	**TWA (mg/m^3)**	**STEL (mg/m^3)**
Tetrafluoroethane	4240	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 such as protective glasses or goggles is recommended when this product is being used.

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 routinely avoid contact with all chemical products 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: rubber, PVC.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Yellow liquid.
Odour:	Slight odour.
Boiling Point:	Not available.
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No data.
Vapour Pressure:	No data.
Vapour Density:	No data.
Specific Gravity:	0.825 at 25°C
Water Solubility:	Insoluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	No data.
Viscosity, kinematic:	4.9mm^2/sec at 40°C (ISO 3104)

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. Keep containers and surrounding areas well ventilated. Keep away from sources of sparks or ignition. Any electrical equipment in the area of this product should be flame proofed.

Incompatibilities: strong oxidising agents.

Fire Decomposition: Combustion forms carbon dioxide. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Water is also formed. May form oxides of sulfur (sulfur dioxide is a respiratory hazard) and other sulfur compounds. Most will have a foul odour. May form oxides of phosphorus and other phosphorus compounds. Fluorine and phosphorus compounds. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: Polymerisation reactions are unlikely; they are not expected to occur.

Section 11 - Toxicological Information

Local Effects:

Target Organs: There is no data to hand indicating any particular target organs.

Inhalation: Vapours may cause drowsiness and dizziness
Skin contact: Irritating to skin. Repeated exposure may cause skin dryness or cracking.
Eye contact Not classified.
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
CHRONIC TOXICITY OR LONG-TERM TOXICITY:
Sensitization: Not classified as a sensitizer.
Mutagenicity This product is not classified as mutagenic.
Carcinogenicity: This product is not classified carcinogenic.
Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Skin contact: Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing

Classification of Hazardous Ingredients

Ingredient	Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.
Kerosene (petroleum), hydrodesulfurized:
LD_{50} (Oral), Rat >5000mg/kg — LD_{50} (Dermal), Rabbit >2000mg/kg
LC_{50} Inhal, 4hr Rat >5.28mg/L
Hydrocarbons, C_9-C_{12}
LD_{50} (Oral), Rat >15000mg/kg — LD_{50} (Dermal), Rabbit >3400mg/kg
LC_{50} Inhal, 4hr Rat >13.1mg/L

Section 12 - Ecological Information

Ecotoxicity: Experimental data on the finished product are not available. It is thought to present little danger for aquatic life. No information is available for used product.

Acute aquatic toxicity Component Information

- **Kerosene (petroleum), hydrodesulfurized:**
- EL_{50} (72 h) 1-3 mg/l (*Pseudokirchneriella subcapitata* - OECD 201)
- EL_{50} (48 h) 1.4 mg/l (*Daphnia magna* – OECD 202)
- LL_{50} (96 h) 2-5 mg/l (*Oncorhynchus mykiss* - OECD 203)
- **Hydrocarbons, C_9-C_{12}**
- ErL_{50} (72h) = 4.1 mg/l (*Pseudokirchneriella subcapitata* - OECD 201)
- ErL_{50} (72h) = 4.6-10 mg/l (*Pseudokirchneriella subcapitata* - OECD 201)
- NOELR (72h) = 0.76 mg/l (*Pseudokirchneriella subcapitata* - growth rate - OECD 201)
- NOELR (72h) = 0.22 mg/l (*Pseudokirchneriella subcapitata* - biomass - OECD 201)
- EL_{50} (48h) = 10-22 mg/l (*Daphnia magna* – OECD 202)
- LL_{50} (96h) = 10-30 mg/l (*Oncorhynchus mykiss* - OECD 203)

Chronic aquatic toxicity Component Information

- **Kerosene (petroleum), hydrodesulfurized:**
- NOEL (21d) 0.89 mg/l (Daphnia magna – OECD 211)
- NOEL (14/28d) 0.098 mg/l (Oncorhynchus mykiss - QSAR Petrotox)
- **Hydrocarbons, C9-C12**
- NOELR (21d) = 0.28 mg/l (Daphnia magna – OCDE 211)
- NOELR (28d) = 0.13 mg/l (Oncorhynchus mykiss - QSAR Petrotox)

Mobility:

- Air: No information available.
- Soil: No information available.
- Water: The product is insoluble; it spreads on the surface of the water

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information

UN Number: 1950, AEROSOLS
Hazchem Code: 2YE
Special Provisions: 63, 190, 277
Limited quantities: ADG 7 specifies a Limited Quantity value of 1000mL for this class of product.
Dangerous Goods Class: Class 2.1: Flammable gases.

Packaging Group: Not set
Packaging Method: P003

Class 2.1 Flammable gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids) (where both flammable liquids and flammable gases are in bulk), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-flammable Non-Toxic gases), 3 (Flammable liquids except where both flammable liquids and flammable gases are in bulk), 6 (Toxic Substances), 8 (Corrosive Substances) 9 (Miscellaneous dangerous goods), Foodstuffs and foodstuff empties.

Section 15 - Regulatory Information

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 (7th 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

Please read all labels carefully before using product.

This MSDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)

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