Safety Data Sheet

Section 1 - Identification of the Material and Supplier

Product Name:	**Quartz 9000 SN 5W40**
Product Code:	714
Product Use:	Synthetic Multi-Grade Oil for Gasoline and Diesel Engines
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:	This product is made from mineral oil with additives.
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. Non-Dangerous Good according to the Australian Dangerous Goods (ADG) Code.
Risk Phrases: Not Hazardous – No criteria found.
Safety Phrases: S23, 24/25. Do not breathe mists. Avoid contact with skin and eyes.
SUSMP Classification: None allocated.
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
UN Number: None allocated.

Potential Health Effects

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.
- **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)
Oil, mineral	8012-95-1	>90	5 (mist)	not set
Zinc alkyldithiophosphate	68649-42-3	<1.5	not set	not set
Bis(nonylphenyl)amine	36878-20-3	<1.5	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 746 766 in New Zealand and is available at all times. Have this MSDS with you when you call.
Inhalation: First aid is not generally required. If in doubt, call the 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.
Advice to Doctor: Treat symptomatically.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: This product is classified as a C2 combustible product. There is little risk of an explosion from this product if commercial quantities are 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 areas, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentrations. Combustion products include sulphur oxides (SO_2 and SO_3) and hydrogen sulphide (H_2S).
Extinguishing Media: Suitable extinguishing media are carbon dioxide, foam, dry chemical and water fog.
Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.
Flashpoint: 220^{0}C (ASTM D 92)
Upper Flammability Limit: No data
Lower Flammability Limit: No data
Autoignition Temperature: No data
Flammability Class: C2

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 including nitrile, neoprene. Eye/face protective equipment should be worn such as

protective glasses and 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 onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent materials are 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 of contamination when sending contaminated clothing to launder.

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 state's Dangerous Goods authority in order to clarify you obligations regarding their storage. Store packages of this product in a cool place. 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/m3)**	**STEL (mg/m3)**
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 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 either rubber or PVC.

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:	Light yellow to brown viscous liquid
Odour:	Characteristic odour
Pour Point:	-33^{0}C
Volatiles:	No data
Vapour Pressure:	No data
Specific Gravity:	0.85 at 15^{0}C
Water Solubility:	Insoluble
Autoignition Temperature:	No data
Coeff Oil/Water Distribution:	Log Pow >6 at 20^{0}C
Kinematic Viscosity:	13-14mm^2/s at 100°C

Section 10 - Stability and Reactivity

Reactivity: The 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 30^0C. Keep containers tightly closed. Keep containers and surrounding areas well-ventilated.
Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form oxides of sulphur (sulphur dioxide is a respiratory hazard) and other sulphur compounds. Most will have a foul odour. May form oxides of phosphorus and other phosphorus compounds. Small quantities of zinc compounds. Carbon monoxide poisoning produces headaches, 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.
Incompatible Materials: Strong oxidising agents.

Section 11 - Toxicological Information

Toxicology: No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.
Bis(nonylphenyl)amine: LD_{50} >5000mg/kg (Rat) ORAL. 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.

Section 12 - Ecological Information

Ecotoxicity: Insufficient data to be sure of status. Expected to not be an environmental hazard. Experimental data on the finished product is not available. It is thought to present little danger to aquatic life. No information is available for used product.
Acute Aquatic Toxicity Component:
Zinc alkyldithiophosphate

- EC_{50} (48h) (*Daphnia magna*) 1-1.5mg/L
- LC_{50} (96h) (*Pimephales promelas*) (static) 1-5mg/L
- LC_{50} (96h) (*Pimephales promelas*) (semi-static) 10-35mg/L

Bis(nonylphenyl)amine

- LC_{50} (96h) (*Mysidopsis bahia*) 14-28mg/L
- LC_{50} (96h) (*Pimephales promelas*) (semi-static) .1000mg/L

Persistence and Degradability: This product is biodegradable. It will not accumulate in the soil or water or cause long term problems. The 'mineral oil' fraction of this product is inherently biodegradable. Given its physical and chemical characteristics, the product generally shows low soil mobility.

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 (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 fire-fighters
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.

This MSDS is prepared in accord with the SWA document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

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