vertex lubricants
Oils // Grease // Coolant // Chemicals

MSDS
Material Safety Data Sheet

MOTO 4T PRO 10W-50

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	MOTO 4T PRO 10W-50
Product Use:	Ultra-High Performance Fully Synthetic Four Stroke Motorcycle Engine Oil
Supplier:	Vertex Lubricants NZ 22 Marphona Crescent Takanini 2105 Phone: 09/640 0004 Email: info@vertexlubricants.co.nz
Emergency Number:	0800 353 645
Chemical Nature:	Distillates (petroleum), hydrotreated heavy paraffinic, solvent-dewaxed heavy paraffinic
Issue Date:	16 July 2024 and is valid for 5 years from this date.

SECTION 2 – HAZARDS IDENTIFICATION

HSNO Classification Not classified.

This material is not classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

GHS label elements

Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Other hazards which do not result in classification	Defatting to the skin. USED ENGINE OILS Used engine oil may contain hazardous components which have the potential to cause skin cancer. See Toxicological Information, section 11 of this Safety Data Sheet.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Substance/mixture: Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Proprietary performance additives.

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥60 - ≤75	64742-54-7
Distillates (petroleum), hydrotreated heavy paraffinic	≥10 - ≤30	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy	≤3	64742-65-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4 – FIRST AID MEASURES

Description of necessary first aid measures

Inhalation	If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Skin contact	Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Protection of first aiders	No action shall be taken involving any personal risk or without suitable training.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing media

Suitable	In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.
Not suitable	Do not use water jet.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur, and the container may burst.
Hazardous combustion products	Combustion products may include the following: carbon oxides (CO, CO2) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO2 etc.)
Hazchem code	Not available
Special precautions for firefighters	No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
Special protective equipment for fire-fighters	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling	Put on appropriate personal protective equipment (see Section 8).
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Not suitable	Prolonged exposure to elevated temperature

SECTION 8 – EXPOSURE CONTROLS AND PEROSNAL PROTECTION

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand). [Oil mineral]** WES-TWA: 5 mg/m³ 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m³ 15 minutes. Issued/ Revised: 9/2010 Form: Mist
Distillates (petroleum), hydrotreated heavy paraffinic	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand). [Oil mineral]** WES-TWA: 5 mg/m³ 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m³ 15 minutes. Issued/ Revised: 9/2010 Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand). [Oil mineral]** WES-TWA: 5 mg/m³ 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m³ 15 minutes. Issued/ Revised: 9/2010 Form: Mist

Biological exposure indices
No exposure indices known

Recommended monitoring procedures	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	All activities involving chemicals should be assessed for their risks to health, to ensure exposure is adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye protection	Safety glasses with side shields.
Hand protection	Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depend upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
Skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Liquid.
Colour	Amber. [Light]
Odour	Unfragranced [Slight]
pH	Not applicable.
Melting point/freezing point	Not available.

Boiling point, initial boiling point, and boiling range	Not available.
Drop Point	Not available.
Flash point	Closed cup: >200°C (>392°F) [Pensky-Martens ASTM D 93]

Auto-ignition temperature

Ingredient name	°C	°F	Method
bis(nonylphenyl)amine	440	824	EU A.15

Vapour pressure

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
bis(nonylphenyl)amine	<0.01	<0.0013	EU A.4	0.0019	0.00025	EU A.4

Relative vapour density	Not available.
Density	<1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies)

Media	Result
water	Not soluble

Viscosity Kinematic: 116.1 cSt at 40°C
Kinematic: 18.2 cSt at 100°C (ASTM D 445)

Particle characteristics

Median particle size Not applicable.

SECTION 10 – STABILITY AND REACTIVITY

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	No known significant effects or critical hazards.
Skin contact	Defatting to the skin. May cause skin dryness and irritation.
Eye contact	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	No specific data.
Ingestion	No specific data.
Skin contact	Adverse symptoms may include the following: irritation dryness cracking
Eye contact	No specific data.

Potential chronic health effects

General	USED ENGINE OILS Combustion products resulting from the operation of internal combustion engines contaminate engine oils during use. Used engine oil may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used engine oil must therefore be avoided and a high standard of personal hygiene maintained.
Inhalation	Not applicable.
Ingestion	Ingestion of large quantities may cause nausea and diarrhea.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Eye contact	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.

Aspiration hazard

Name
Distillates (petroleum), hydrotreated heavy paraffinic

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity	No known significant effects or critical hazards.

Persistence and degradability
Expected to be biodegradable.

Bioaccumulative potential
This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Mobility	Spillages may penetrate the soil causing ground water contamination.
Soil/water partition coefficient (KOC)	Not available.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

SECTION 13 – DISPOSAL CONSIDERATION

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 – TRANSPORT INFORMATION

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	Not regulated.	-	-	-		-
ADG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-

PG*: Packing group

SECTION 15 – REGULATORY INFORMATION

New Zealand Regulatory Information

HSNO Approval Number	None assigned.
HSNO Group Standard	None assigned.
HSNO Classification	None assigned.

Regulation according to other foreign laws

REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
United States inventory (TSCA 8b)	All components are active or exempted.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory status	All components are listed or exempted.
China inventory (IECSC)	At least one component is not listed.
Japan inventory (CSCL)	At least one component is not listed.

Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	At least one component is not listed.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.

SECTION 16 – OTHER INFORMATION

Date of issue/Date of revision

16 July 2024

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

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

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Please read all labels carefully before using product.