SAFETY DATA SHEET

According to HSNO Approved Code of Practice 8-1 09-06

SDS # : 31364

ALTIS MV 2

Issuing date: 2019-01-09 **Revision Date:** 2019-01-09 **Version** 1

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product identifier

Product name **ALTIS MV 2**

Other means of identification

Number 1JE
Substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Identified uses Lubricating grease.

Details of the supplier of the safety data sheet

Supplier
TOTAL OIL ASIA PACIFIC PTE LTD
331 North Bridge Road
#23-01 Odeon Towers
Singapore 188720
Tel: +65 6879 2200
Fax: +65 6879 2203

Importer
Oil Intel Limited
56 Whakatu Road, Whakatu
Hastings 4172
NEW ZEALAND
Phone: +64 (06) 871 53 25
Fax: +64 (06) 870 48 90

For further information, please contact:
Contact Point HSE
E-mail Address ms.ap-sds@total.com

Emergency telephone

New Zealand: +64 9 929 1483
Asia-Pacific: +65 3158 1074
New Zealand Poisons Information Centre: 0800 764 766

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001

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Acute aquatic toxicity - Category 3 (HSNO - 9.1D)

GHS Label elements, including precautionary statements

Signal word **None**

Hazard Statements
H402 - Harmful to aquatic life

Precautionary Statements - Prevention
• Avoid release to the environment

Precautionary Statements - Disposal
• Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

Physical-Chemical Properties Contaminated surfaces will be extremely slippery

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Mineral oil of petroleum origin.

Chemical Name	CAS-No	EC-No	Weight %
A mixture of: 3,3'-dicyclohexyl-1,1'-methylene bis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea	^	-	5-<10
A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives	192268-65-8	421-820-9	1-<2.5
Hydrocarbon waxes (petroleum), oxidized	64743-00-6	265-205-1	1-<3
Nonylphenol	25154-52-3	246-672-0	0.01-<0.025
Phenol, 4-nonyl-, branched	84852-15-3	284-325-5	0.01-<0.025

Additional information Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR

EMERGENCY MEDICAL CARE.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. Take victim immediately to hospital.

Inhalation Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.

Ingestion Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Protection of First-aiders First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Skin contact Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.

Eye contact Not classified based on available data.

Inhalation Not classified based on available data.

Ingestion Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Carbon dioxide (CO_2). ABC powder. Foam. Water spray or fog.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Special Hazard 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 concentration. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Mercaptans, Nitrogen oxides (NOx), Phosphorous oxides.

Advice for fire-fighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Other information

Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General Information Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions

General Information Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment If necessary dike the product with dry earth, sand or similar non-combustible materials.

Methods for cleaning up Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Other information

Personal Protective Equipment See Section 8 for more detail.

Waste treatment See section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling For personal protection see section 8. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing.

Prevention of fire and explosion Take precautionary measures against static discharges.

Hygiene measures Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before

breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store at room temperature. Protect from moisture.

Materials to Avoid

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Mineral oil mist:
USA: OSHA (PEL) TWA 5 mg/m^3, NIOSH (REL) TWA 5 mg/m^3, STEL 10 mg/m^3, ACGIH (TLV) TWA 5 mg/m^3 (highly refined)

Appropriate engineering controls

Engineering Measures

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Individual protection measures, such as personal protective equipment (PPE)

Personal Protective Equipment

General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied.

Respiratory protection

None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387): Type A/P1. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's

instructions and the regulations governing their choices and uses.

Eye Protection If splashes are likely to occur, wear:. Safety glasses with side-shields. EN 166.

Skin and body protection Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Type 4/6.

Hand Protection Hydrocarbon-proof gloves: Fluorinated rubber, Nitrile rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Color		green	
Physical State @20°C		solid	
Odor		Characteristic	
Odor Threshold		No information available	
Property	**Values**	**Remarks**	**Method**
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range		Not applicable	
Flash point		Not applicable	
Evaporation rate		No information available	
Flammability Limits in Air		No information available	
upper		No information available	
Lower		No information available	
Vapor Pressure		No information available	
Vapor density		No information available	
Relative density	0.900	@ 20 °C	
Density	900 kg/m³	@ 20 °C	
Water solubility		Insoluble	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature		No information available	
Decomposition temperature		No information available	
Viscosity, kinematic		Not applicable	

Explosive properties	Not explosive
Oxidizing Properties	Not applicable
Possibility of hazardous reactions	None under normal processing

9.2. Other information

Freezing Point No information available

10. STABILITY AND REACTIVITY

Reactivity None under normal processing.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.

Incompatible materials Strong oxidizing agents.

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Mercaptans, Nitrogen oxides (NOx), Phosphorous oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Not classified based on available data.
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Skin contact	Not classified based on available data. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
Eye contact	Not classified based on available data.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Oral Not classified based on available data.
ATEmix (oral) > 5,000.00 mg/kg
1E-07 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Dermal Not classified based on available data.
ATEmix (dermal) > 5,000.00 mg/kg
1E-07 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

Inhalation Not classified based on available data
ATEmix (inhalation-gas) > 20,000.00 ppm
9.3540001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
ATEmix (inhalation-vapor) 255.90 mg/l
1.5000001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
ATEmix (inhalation-dust/mist) 64.90 mg/l
1.5000001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives 192268-65-8	LD50 >2000 mg/kg bw (rat)	LD50 >2000 mg/kg bw (rat)	
Hydrocarbon waxes (petroleum), oxidized 64743-00-6	LD50 > 5000 mg/kg (rat)	LD50 > 2000 mg/kg (rabbit)	
Nonylphenol 25154-52-3	LD50 1882 mg/kg (Rat)	LD50 2013 mg/kg (Rabbit)	
Phenol, 4-nonyl-, branched 84852-15-3	1412 mg/kg bw (rat-ECHA)		

Skin corrosion/irritation Not classified based on available data.

Serious eye damage/eye irritation Not classified based on available data.

Sensitization Not classified based on available data.

Carcinogenicity Not classified based on available data.

Germ Cell Mutagenicity Not classified based on available data

Reproductive toxicity Not classified based on available data. Contains toxic substance(s) listed as toxic to reproduction.

Target Organ Effects (STOT) None known

STOT - single exposure Not classified based on available data

STOT - repeated exposure Not classified based on available data

Aspiration hazard Not classified based on available data.

Other adverse effects Characteristic skin lesions (pimples) may develop following prolonged and repeated exposures (contact with contaminated clothing).

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life.

Acute aquatic toxicity - Product Information

No information available.

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
A mixture of: 3,3'-dicyclohexyl-1,1'-methylenebis(4,1-phenylene)diurea; 3-cyclohexyl-1-(4-(4-(3-octadecylureido)benzyl)phenyl)urea; 3,3'-dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea ^				EC50(3h) 100 mg/l
A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives 192268-65-8	EC50(72h) >100 mg/l (Scenedesmus subspicatus-Guideline ODCE 201)	EC50(48h) >100 mg/l (Daphnia magna-Guideline ODCE 202)	LC50(96h) >100 mg/l (Brachydanio rerio-Guideline ODCE 203)	EC20(3h) 403 mg/l (guideline ODCE 209 statique- boue activée)
Nonylphenol 25154-52-3	EC50 (72h) = 0.32 mg/l (algae)	EC50 (48h) 0.085 mg/l (Daphnia magna)	LC50 (96h) = 0.128 mg/l (fish)	
Phenol, 4-nonyl-, branched 84852-15-3	LC50 (72h) 0,0563 mg/l alguea	EC50 (48h) 0,035 mg/l daphnia magna	LC50(96h) = 0.1383 mg/l Pimephales promelas LC50(96h) 0.14-0.23 Oncorhynchus mykiss	

Chronic aquatic toxicity - Product Information

No information available.

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Toxicity to microorganisms
A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives		NOEC(21d) >= 5,5 mg/l (Daphnia magna (Guideline ODCE 211, semi-statique)		

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192268-65-8				
Nonylphenol 25154-52-3		NOEC (21d) 0.089 mg/l (Daphnia magna)		
Phenol, 4-nonyl-, branched 84852-15-3			NOEC (91d) 0.006 mg/l Oncorhynchus mykiss	

Effects on terrestrial organisms No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

Product Information No information available.

logPow No information available

Component Information

Chemical Name	log Pow
A mixture of: triphenylthiophosphate and tertiary butylated phenyl derivatives - 192268-65-8	4.8-8.8 @ 22 °C and pH 6.7
Nonylphenol - 25154-52-3	4.48

Mobility

Soil Given its physical and chemical characteristics, the product has no soil mobility.
Air Loss by evaporation is limited.
Water The product is insoluble and floats on water.

Other adverse effects

General Information No information available.

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products Should not be released into the environment. Do not empty into drains. Dispose of in accordance with all applicable national environmental laws and regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information Refer to section 8 for safety and protective measures for disposal personnel.

14. TRANSPORT INFORMATION

ADR/RID Not regulated

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IMDG/IMO Not regulated

ICAO/IATA Not regulated

15. REGULATORY INFORMATION

International Inventories

All the substances contained in this product are listed or exempted from listing in the following inventories:
China (IECSC)
Australia (AICS)
Canada (DSL/NDSL)
U.S.A. (TSCA)
Korea (KECL)
New Zealand (NZIoC)

National regulatory information

New Zealand

• See section 8 for national exposure control parameters
• This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO)

New Zealand HSNO approval code or group standard HSR002605, Lubricants (Low Hazard)

This SDS may not cover all of the controls relevant for this substance or mixture. The Environmental Protection Authority of New Zealand (EPA) 'User Guide to the HSNO Controls' should be consulted for a comprehensive list of controls and reference to the regulations

16. OTHER INFORMATION

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Revision Note No information available

Abbreviations, acronyms
ACGIH = American Conference of Governmental Industrial Hygienists
bw = body weight
bw/day = body weight/day
EC x = Effect Concentration associated with x% response
GLP = Good Laboratory Practice
IARC = International Agency for Research of Cancer
LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals
LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals
LL = Lethal Loading
NIOSH = National Institute of Occupational Safety and Health
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOEL = No Observed Effect Level
OECD = Organization for Economic Co-operation and Development

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OSHA = Occupational Safety and Health Administration
UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

Legend:
Section 8

Ceiling:	Maximum limit value	TWA:	Time weighted average
STEL:	Short term exposure limit	*	Skin designation
+	Sensitizer	C	Carcinogen

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above.It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk.The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity.The user bears sole liability for the precautions required when using the product.The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive.It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of the Safety Data Sheet