

## Castrol Transmax Manual FE 75W

## Section 1. Identification

<b>Product name</b>	Castrol Transmax Manual FE 75W
<b>Product code</b>	469681-DE01
<b>SDS no.</b>	469681
<b>Use of the substance/mixture</b>	Manual transmission fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative. Manual transmission fluid For specific application advice see appropriate Technical Data Sheet or consult our company representative.
<b>Product type</b>	Liquid.
<b>Supplier</b>	Castrol New Zealand Limited 73 Remuera Road Newmarket Auckland, New Zealand  www.castrol.com/nz Technical Helpline 0800 10 40 60
<b>Emergency telephone number</b>	0800 243643 (0800 CHEMHELP) (NZ use only)
<b>New Zealand National Poisons Centre</b>	0800 764 766 National Poison Centre

## Section 2. Hazards identification

<b>HSNO Classification</b>	REPRODUCTIVE TOXICITY - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
This material is 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.	
<b>Routes of entry</b>	Dermal contact. Eye contact. Inhalation.
<b>GHS label elements</b>	
<b>Signal word</b>	Warning
<b>Hazard statements</b>	Suspected of damaging fertility or the unborn child. Harmful to aquatic life with long lasting effects.
<b>Precautionary statements</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Avoid release to the environment.
<b>Response</b>	IF exposed or concerned: Get medical attention.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Symbol</b>	
<b>Other hazards which do not result in classification</b>	Defatting to the skin.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

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

Ingredient name	% (w/w)	CAS number
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≥60 - ≤75	72623-87-1
1-Decene, homopolymer, hydrogenated	≥10 - ≤30	68037-01-4
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	≥10 - ≤30	68037-01-4
Distillates (petroleum), hydrotreated heavy paraffinic	≤5	64742-54-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤3	64742-65-0
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	<1	192268-65-8
zinc isodecyl phosphorodithioate	≤0.3	25103-54-2
2,6-di-tert-butylphenol	≤0.3	128-39-2

**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

<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention.
<b>Ingestion</b>	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention.
<b>Skin contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.
<b>Eye contact</b>	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

<b>Notes to physician</b>	Treatment should in general be symptomatic and directed to relieving any effects.
<b>Protection of first-aiders</b>	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## Section 5. Firefighting measures

### Extinguishing media

<b>Suitable</b>	Use foam or all-purpose dry chemical to extinguish.
<b>Not suitable</b>	Do not use water jet.
<b>Specific hazards arising from the chemical</b>	Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects.
<b>Hazardous combustion products</b>	Combustion products may include the following: carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide)
<b>Hazchem code</b>	Not available.
<b>Special precautions for fire-fighters</b>	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.

## Section 5. Firefighting measures

### 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

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

#### For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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). Water polluting material. May be harmful to the environment if released in large quantities.

### 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. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilt product. 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). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways.

### 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. Store locked up. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

### Not suitable

Prolonged exposure to elevated temperature

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	<b>NZ HSWA 2015 - GRWM 2016 (New Zealand). [Oil mineral]</b> WES-TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/ Revised: 9/2010 Form: Mist
Distillates (petroleum), hydrotreated heavy paraffinic	<b>NZ HSWA 2015 - GRWM 2016 (New Zealand). [Oil mineral]</b> WES-TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/ Revised: 9/2010 Form: Mist
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<b>NZ HSWA 2015 - GRWM 2016 (New Zealand). [Oil mineral]</b> WES-TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/ Revised: 6/2016 Form: Mist WES-STEL: 10 mg/m <sup>3</sup> 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 exposures are 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.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 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 depends 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.

## Section 8. Exposure controls/personal protection

### 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

Brown.

#### Odour

Not available.

#### 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

Open cup: >220°C (>428°F) [Cleveland ASTM D 92]

#### Auto-ignition temperature

Ingredient name	°C	°F	Method
1-Decene, homopolymer, hydrogenated	343 to 369	649.4 to 696.2	ASTM D 2159
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	343 to 369	649.4 to 696.2	ASTM D 2159

#### Vapour pressure

Ingredient name	Vapour Pressure at 20 °C			Vapour pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	<0.08	<0.011	ASTM D 5191			
1-Decene, homopolymer, hydrogenated	<0.0041	<0.00055	ASTM E 1194-87			
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	<0.0041	<0.00055	ASTM E 1194-87			
Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
Distillates (petroleum), solvent-dewaxed heavy paraffinic	<0.08	<0.011	ASTM D 5191			

#### Relative vapour density

Not available.

#### Density

<1000 kg/m<sup>3</sup> (<1 g/cm<sup>3</sup>) at 15°C

#### Solubility(ies)

Media	Result
water	Not soluble

## Section 9. Physical and chemical properties

**Viscosity** Kinematic: 32.2 mm<sup>2</sup>/s (32.2 cSt) at 40°C  
Kinematic: 6.3 to 6.8 mm<sup>2</sup>/s (6.3 to 6.8 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** Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

**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** May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs.

**Ingestion** Adverse symptoms may include the following:  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Skin contact** Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
reduced foetal weight  
increase in foetal deaths  
skeletal malformations

**Eye contact** No specific data.

### Acute toxicity

Product/ingredient name	Test	Species	Result	Exposure	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	Based on studies with similar substances.
	LD50 Dermal	Rat	>5000 mg/kg	-	Based on studies with similar substances.
	LD50 Oral	Rat	>5000 mg/kg	-	Based on studies with similar substances.
1-Decene, homopolymer, hydrogenated	LD50 Dermal	Rat	>2000 mg/kg	-	Based on studies with similar



## Section 11. Toxicological information

						substances.
	LD50 Oral	Rat	>5000 mg/kg	-		Based on studies with similar substances.
	LD50 Inhalation Dusts and mists	Rat	>5.2 mg/l	4 hours	-	
Dec-1-ene, homopolymer, hydrogenated Dec- 1-ene, oligomers, hydrogenated	LD50 Dermal	Rat	>2000 mg/kg	-		Based on studies with similar substances.
	LD50 Oral	Rat	>2000 mg/kg	-	-	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours		Based on studies with similar substances.
	LD50 Dermal	Rat	>2000 mg/kg	-		Based on studies with similar substances.
	LD50 Oral	Rat	>5000 mg/kg	-		Based on studies with similar substances.
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	LD50 Dermal	Rabbit	>2000 mg/kg	-	-	
	LD50 Oral	Rat	>2000 mg/kg	-	-	
zinc isodecyl phosphorodithioate	LD50 Dermal	Rat	>5000 mg/kg	-		Based on studies with similar substances.
	LD50 Oral	Rat	3100 mg/kg	-		Based on studies with similar substances.
2,6-di-tert-butylphenol	LD50 Dermal	Rabbit	>5000 mg/kg	-	-	
	LD50 Oral	Rat	>5000 mg/kg	-	-	

### Conclusion/Summary

Not available.

### Irritation/Corrosion

Product/ingredient name	Species	Result	Score	Exposure	Observation	Conc.	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Rabbit	Eyes - Severe irritant	-	-	-	-	Based on studies with similar substances.
	Rabbit	Skin - Non- irritant to skin.	-	-	-	-	Based on studies with similar

## Section 11. Toxicological information

								substances.
1-Decene, homopolymer, hydrogenated	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	-	
	Rabbit	Skin - Non-irritant to skin.	-	-	-	-	-	
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	-	Based on studies with similar substances.
	Rabbit	Skin - Non-irritant to skin.	-	-	-	-	-	
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	-	Based on studies with similar substances.
	Rabbit	Skin - Non-irritant to skin.	-	-	-	-	-	Based on studies with similar substances.
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	-	
	Rabbit	Skin - Non-irritant to skin.	-	-	-	-	-	
zinc isodecyl phosphorodithioate	Unspecified	Eyes - Non-irritating to the eyes.	-	-	-	-	-	BCOP
	Unspecified	Skin - Non-irritant to skin.	-	-	-	-	-	RHE
2,6-di-tert-butylphenol	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	-	
	Rabbit	Skin - Irritant	-	-	-	-	-	

### Sensitisation

Product/ingredient name	Route of exposure	Species	Result	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	skin	Guinea pig	Not sensitising	Based on studies with similar substances.
1-Decene, homopolymer, hydrogenated	skin	Guinea pig	Not sensitising	-
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	skin	Guinea pig	Not sensitising	-



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Distillates (petroleum), solvent-dewaxed heavy paraffinic	skin	Guinea pig	Not sensitising	Based on studies with similar substances.
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	skin	Guinea pig	Not sensitising	-
zinc isodecyl phosphorodithioate	skin	Guinea pig	Not sensitising	Based on studies with similar substances.
2,6-di-tert-butylphenol	skin	Guinea pig	Not sensitising	-

### Potential chronic health effects

<b>General</b>	No known significant effects or critical hazards.
<b>Inhalation</b>	Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
<b>Ingestion</b>	Ingestion of large quantities may cause nausea and diarrhoea.
<b>Skin contact</b>	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
<b>Eye contact</b>	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	Suspected of damaging the unborn child.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.

### Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammal - species unspecified	Positive	Based on studies with similar substances.
	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative	Based on studies with similar substances.
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
1-Decene, homopolymer, hydrogenated	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative	-
	OECD 473 In vitro	Experiment: In vitro	Negative	Based on studies

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	Mammalian Chromosomal Aberration Test	Subject: Mammal - species unspecified		with similar substances.
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo	Negative	Based on studies with similar substances.
		Subject: Mammal - species unspecified		
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro	Negative	Based on studies with similar substances.
		Subject: Bacteria		
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro	Negative	Based on studies with similar substances.
		Subject: Mammal - species unspecified		
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo	Negative	Based on studies with similar substances.
		Subject: Mammal - species unspecified		
Distillates (petroleum), solvent-dewaxed heavy paraffinic	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro	Negative	Based on studies with similar substances.
		Subject: Bacteria		
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro	Negative	Based on studies with similar substances.
		Subject: Mammal - species unspecified		
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro	Negative	Based on studies with similar substances.
		Subject: Unspecified		
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo	Negative	Based on studies with similar substances.
		Subject: Mammal - species unspecified		
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro	Negative	-
		Subject: Bacteria		
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro	Negative	-

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		Subject: Mammal - species unspecified			
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro	Negative	-	
		Subject: Mammal - species unspecified			
zinc isodecyl phosphorodithioate	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro	Negative	-	Based on studies with similar substances.
		Subject: Bacteria			
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo	Negative	-	Based on studies with similar substances.
		Subject: Mammal - species unspecified			
2,6-di-tert-butylphenol	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro	Negative	-	
		Subject: Bacteria			
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro	Negative	-	
		Subject: Mammal - species unspecified			

### Teratogenicity

Product/ingredient name	Test	Species	Result	Exposure
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Negative - Oral	Rat	-	-
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Positive - Oral	Rat	-	-

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Result	Exposure
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Negative	Negative	Negative	Rat	Oral	-
1-Decene, homopolymer, hydrogenated	Negative	Negative	Negative	Rat	Oral	-
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	Negative	Negative	Negative	Rat	Oral	-
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Negative	Negative	Negative	Rat	Oral	-
zinc isodecyl phosphorodithioate	Negative	Negative	Negative	Rat	Oral	-

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2,6-di-tert-butylphenol      Positive      Negative      Equivocal      Rat      Oral      -

### Aspiration hazard

#### Name

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based  
 1-Decene, homopolymer, hydrogenated  
 Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated  
 Distillates (petroleum), solvent-dewaxed heavy paraffinic

## Section 12. Ecological information

### Ecotoxicity

This material is harmful to aquatic life with long lasting effects.

### Aquatic and terrestrial toxicity

Product/ingredient name	Species	Result/Test	Exposure	Effects	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Daphnia	Acute EL50 >10000 mg/l	48 hours	-	Based on studies with similar substances.
	Fish	Acute LL50 >100 mg/l	96 hours	-	Based on studies with similar substances.
	Algae	Acute NOEL ≥100 mg/l	72 hours	-	-
	Daphnia	Chronic NOEL ≥1000 mg/l	21 days	-	Based on studies with similar substances.
1-Decene, homopolymer, hydrogenated	Algae	Acute EL50 >1000 mg/l	72 hours	-	-
	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	-
	Fish	Acute LL50 >1000 mg/l	96 hours	-	-
	Daphnia	Chronic NOELR 125 mg/l	21 days	-	-
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	Algae	Acute EL50 >1000 mg/l	72 hours	-	Based on studies with similar substances.
	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	Based on studies with similar substances.
	Fish	Acute LL50 >1000 mg/l	96 hours	-	-
	Daphnia	Chronic NOELR 125 mg/l	21 days	-	Based on studies with similar substances.

## Section 12. Ecological information

Distillates (petroleum), solvent-dewaxed heavy paraffinic	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	Based on studies with similar substances.
	Algae	Acute ErL50 100 mg/l	72 hours	-	Based on studies with similar substances.
	Fish	Acute LL50 >100 mg/l	96 hours	-	Based on studies with similar substances.
	Algae	Chronic NOELR 100 mg/l	72 hours	-	Based on studies with similar substances.
	Daphnia	Chronic NOELR 10 to 1000 mg/l	21 days	-	Based on studies with similar substances.
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	Algae	Acute EC50 >100 mg/l	72 hours	-	-
	Daphnia	Acute EC50 >100 mg/l	48 hours	-	-
	Fish	Acute LC50 >100 mg/l	96 hours	-	-
	Algae	Chronic NOEC >100 mg/l	72 hours	-	-
	Daphnia	Chronic NOEC 0.026 mg/l	21 days	-	-
	Fish	Chronic NOEC 0.0044 mg/l	87 days	-	-
zinc isodecyl phosphorodithioate	Daphnia	Acute EC50 0.2 mg/l	48 hours	-	-
	Algae	Acute ErC50 >1.6 mg/l	72 hours	-	-
	Fish	Acute LC50 >0.28 mg/l	96 hours	-	-
2,6-di-tert-butylphenol	Algae	Acute EL50 1.2 mg/l	96 hours	-	-
	Daphnia	Acute EL50 0.45 mg/l	48 hours	-	-
	Fish	Acute LC50 1.4 mg/l	96 hours	-	-
	Algae	Chronic NOEC 0.64 mg/l	96 hours	-	-

## Section 12. Ecological information

Daphnia	Chronic NOEC 0.035 mg/l	21 days	-	-
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### Persistence and degradability

Partially biodegradable.

Product/ingredient name	Test	Result	Remarks
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301F	31 % - Inherent - 28 days	Based on studies with similar substances.
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	OECD 301D	0 % - Not readily - 28 days	-
zinc isodecyl phosphorodithioate	OECD 301b	1 % - Not readily - 28 days	Based on studies with similar substances.
2,6-di-tert-butylphenol	OECD 301B	24 % - Not readily - 28 days	-

### Bioaccumulative potential

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

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
1-Decene, homopolymer, hydrogenated	>10	-	high
Dec-1-ene, homopolymer, hydrogenated	>10	-	high
Dec-1-ene, oligomers, hydrogenated	>10	-	high
reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives	4.8 to 8.8	-	high
2,6-di-tert-butylphenol	4.5	-	high

### Mobility in soil

#### **Mobility**

Spillages may penetrate the soil causing ground water contamination.

#### **Soil/water partition coefficient (K<sub>oc</sub>)**

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 considerations

### 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

<b>HSNO Approval Number</b>	HSR002606
<b>HSNO Group Standard</b>	Lubricants, Lubricant Additives, Coolants and Anti-freeze Agents (Subsidiary Hazard) Group Standard 2020
<b>HSNO Classification</b>	REPRODUCTIVE TOXICITY - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

### Regulation according to other foreign laws

<b>REACH Status</b>	For the REACH status of this product please consult your company contact, as identified in Section 1.
<b>United States inventory (TSCA 8b)</b>	All components are active or exempted.
<b>Australia inventory (AIC)</b>	All components are listed or exempted.
<b>Canada inventory status</b>	All components are listed or exempted.
<b>China inventory (IECSC)</b>	All components are listed or exempted.
<b>Japan inventory (CSCL)</b>	All components are listed or exempted.
<b>Korea inventory (KECI)</b>	All components are listed or exempted.
<b>Philippines inventory (PICCS)</b>	All components are listed or exempted.
<b>Taiwan Chemical Substances Inventory (TCSI)</b>	All components are listed or exempted.

## Section 16. Other information

### History

<b>Date of issue/Date of revision</b>	18 August 2023
<b>Date of previous issue</b>	6 June 2023.
<b>Version</b>	4.01
<b>Prepared by</b>	Not available.
<b>Key to abbreviations</b>	Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

### Notice to reader

Indicates information that has changed from previously issued version.



## Section 16. Other information

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

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