SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Castrol EDGE 0W-30

Product code 463737-BE02

SDS # 463737

Product type Liquid.

Use of the substance/ mixture Automotive engine crankcase lubricant.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

1.3 Details of the supplier of the safety data sheet

Supplier

Castrol Holdings Europe B.V.,
d'Arcyweg 76, 3198NA
Europoort
Rotterdam

Castrol Hellas MAE
26A, IOANNOU APOSTOLOPOULOU, Chalandri, 15231
Greece
+30 210 6887 777

E-mail address MSDSadvice@bp.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE NUMBER Carechem: +44 (0) 1235 239 670 (24/7)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 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.

Hazardous ingredients Not applicable.

Supplemental label elements Safety data sheet available on request.

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Special packaging requirements

SECTION 2: Hazards identification

Containers to be fitted with child-resistant fastenings Not applicable.

Tactile warning of danger Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Product meets the criteria for endocrine disrupting properties according to Regulation (EC) No. 1907/2006. This substance/mixture does not contain any components that are considered to have endocrine disrupting properties.

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

3.2 Mixtures

Product definition Mixture

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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Distillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥50 - ≤75	Asp. Tox. 1, H304	-	[1]
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	REACH #: 01-2119474878-16 EC: 276-737-9 CAS: 72623-86-0 Index: 649-482-00-X	≤3	Asp. Tox. 1, H304	-	[1]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	REACH #: 01-2119474889-13 EC: 276-738-4 CAS: 72623-87-1 Index: 649-483-00-5	≤3	Asp. Tox. 1, H304	-	[1]
1-Decene, homopolymer, hydrogenated	REACH #: 01-2119486452-34 EC: 500-183-1 CAS: 68037-01-4	≤3	Asp. Tox. 1, H304	-	[1]
Dec-1-ene, trimers, hydrogenated	REACH #: 01-2119486452-34 EC: 500-393-3 CAS: 157707-86-3	≤3	Asp. Tox. 1, H304	-	[1]
Dec-1-ene, trimers, hydrogenated	REACH #: 01-2119493949-12 EC: 500-393-3 CAS: 157707-86-3	≤3	Asp. Tox. 1, H304	-	[1]

See Section 16 for the full text of the H statements declared above.

Type

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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.

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 irritation develops.

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.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Potential acute health effects

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 See: Section 11. Toxicological Information - Potential acute health effects: Eye contact

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

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.

4.3 Indication of any immediate medical attention and special treatment needed

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media Do not use water jet. The use of a water jet may cause the fire to spread by splashing the burning product.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture 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, CO_2) (carbon monoxide, carbon dioxide)
nitrogen oxides (NO, NO_2 etc.)

5.3 Advice for firefighters

Special precautions for fire-fighters 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 appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Put on appropriate personal protective equipment.

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".

6.2 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).

6.3 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 non-combustible, 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.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/ containers designed for use with this product. Do not store in unlabelled containers.

Not suitable

Prolonged exposure to elevated temperature.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Europe

No exposure limit value known.

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Biological exposure indices

Product/ingredient name	Exposure indices

No exposure indices known.

SECTION 8: Exposure controls/personal protection

Derived No Effect Level

No DNELs/DMELs available.

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
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.
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. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

Eye/face protection

Safety glasses with side shields.

Skin protection

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile gloves.
Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type.
Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.
If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.
It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

SECTION 8: Exposure controls/personal protection

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.

- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and body

Use of protective clothing is good industrial practice.
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Refer to standards:

Respiratory protection: EN 529
Gloves: EN 420, EN 374
Eye protection: EN 166
Filtering half-mask: EN 149
Filtering half-mask with valve: EN 405
Half-mask: EN 140 plus filter
Full-face mask: EN 136 plus filter
Particulate filters: EN 143
Gas/combined filters: EN 14387

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Colour	Amber. [Light]
Odour	Not available.
Odour threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	-45 °C
Flash point	Closed cup: 201°C (393.8°F) [Pensky-Martens ASTM D 93]
Evaporation rate	Not available.
Flammability	Not available.
Lower and upper explosion limit	Not available.
Vapour pressure	

SECTION 9: Physical and chemical properties

Ingredient name	Vapour Pressure at 20˚C mm Hg	Vapour Pressure at 20˚C kPa	Vapour Pressure at 20˚C Method	Vapour pressure at 50˚C mm Hg	Vapour pressure at 50˚C kPa	Vapour pressure at 50˚C Method
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191			
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	<0.0041	<0.00055	ASTM E 1194-87			
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	<0.07501	<0.01	ASTM D 5191			
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	<0.07501	<0.01	ASTM D 5191			
bis(nonylphenyl)amine	<0.01	<0.0013	EU A.4	0.0019	0.00025	EU A.4

Vapour density Not available.

Not available.

Density and/or Relative density <1000 kg/m³ (<1 g/cm³) at 15°C

Solubility(ies)

Media	Result
water	Not soluble

Partition coefficient n-octanol/water (log value) Not applicable.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Kinematic viscosity Kinematic: 68.1 mm^2/s (68.1 cSt) at 40°C
Kinematic: 12.05 to 12.44 mm^2/s (12.05 to 12.44 cSt) at 100°C

Explosive properties Not available.

Oxidising properties Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

10.2 Chemical stability The product is stable.

10.3 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.

10.4 Conditions to avoid Avoid all possible sources of ignition (spark or flame).

10.5 Incompatible materials Reactive or incompatible with the following materials: oxidising materials.

10.6 Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name **Result**

SECTION 11: Toxicological information

Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rabbit - Dermal - LD50** >5000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5 mg/l [4 hours] OECD 403
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**Rat - Oral - LD50** >5000 mg/kg OECD 401 **Rat - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5 mg/l [4 hours] OECD 403
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Rat - Oral - LD50** >5000 mg/kg OECD 423 **Rat - Dermal - LD50** >5000 mg/kg OECD 402 **Rat - Inhalation - LC50 Dusts and mists** >5 mg/l [4 hours] OECD 403
Dec-1-ene, homopolymer, hydrogenated	**Rat - Oral - LD50** >5000 mg/kg OECD 423 **Rat - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LD50 Dusts and mists** >5.2 mg/l [4 hours] OECD 403
Dec-1-ene, trimers, hydrogenated	**Rat - Oral - LD50** >5000 mg/kg OECD 423 **Rat - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LD50 Dusts and mists** >5.2 mg/l [4 hours] OECD 403
Dec-1-ene, trimers, hydrogenated	**Rat - Oral - LD50** >5000 mg/kg OECD 423 **Rat - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LD50 Dusts and mists** >5.2 mg/l [4 hours] OECD 403

SECTION 11: Toxicological information

Acute toxicity estimates

N/A

Skin corrosion/irritation

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Skin - Mild irritant** OECD 404
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**Rabbit - Skin - Non-irritant to skin.** OECD 404
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Rabbit - Skin - Non-irritant to skin.** OECD 404
Dec-1-ene, homopolymer, hydrogenated	**Rabbit - Skin - Non-irritant to skin.** OECD 404
Dec-1-ene, trimers, hydrogenated	**Rabbit - Skin - Non-irritant to skin.** OECD 404
Dec-1-ene, trimers, hydrogenated	**Rabbit - Skin - Non-irritant to skin.** OECD 404

Serious eye damage/eye irritation

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Rabbit - Eyes - Severe irritant** OECD 405
Dec-1-ene, homopolymer, hydrogenated	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Dec-1-ene, trimers, hydrogenated	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405
Dec-1-ene, trimers, hydrogenated	**Rabbit - Eyes - Non-irritating to the eyes.** OECD 405

Respiratory corrosion/irritation

Not available.

Respiratory or skin sensitization

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Guinea pig - skin** OECD 406 Result: Not sensitising
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**Guinea pig - skin** OECD 406 Result: Not sensitising
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Guinea pig - skin** OECD 406 Result: Not sensitising
Dec-1-ene, homopolymer, hydrogenated	**Guinea pig - skin** OECD 406 Result: Not sensitising

SECTION 11: Toxicological information

Dec-1-ene, trimers, hydrogenated	**Guinea pig - skin** OECD 406 Result: Not sensitising
Dec-1-ene, trimers, hydrogenated	**Guinea pig - skin** OECD 406 Result: Not sensitising

Germ cell mutagenicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**In vitro - Bacteria** Bacterial Reverse Mutation Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Chromosomal Aberration Test Result: Negative **In vivo - Mammal - species unspecified** Mammalian Erythrocyte Micronucleus Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Cell Gene Mutation Test Result: Negative
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative **In vitro - Unspecified** OECD [In vitro Mammalian Cell Gene Mutation Test] Result: Negative **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Positive **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Cell Gene Mutation Test] Result: Negative
Dec-1-ene, homopolymer, hydrogenated	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative

SECTION 11: Toxicological information

Dec-1-ene, trimers, hydrogenated	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative
Dec-1-ene, trimers, hydrogenated	**In vitro - Bacteria** OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative

Carcinogenicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Mouse - Dermal - Unspecified** OECD 451 Result: Negative

Reproductive toxicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Rat - Oral** OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Dec-1-ene, homopolymer, hydrogenated	**Rat - Oral** OECD 415 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Dec-1-ene, trimers, hydrogenated	**Rat - Oral** OECD 415 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative
Dec-1-ene, trimers, hydrogenated	**Rat - Oral** OECD 415 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative

Specific target organ toxicity (single exposure)

Not available.

SECTION 11: Toxicological information

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1
Dec-1-ene, homopolymer, hydrogenated	ASPIRATION HAZARD - Category 1
Dec-1-ene, trimers, hydrogenated	ASPIRATION HAZARD - Category 1
Dec-1-ene, trimers, hydrogenated	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

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 See: Section 11. Toxicological Information - Potential acute health effects: Eye contact

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.

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

Inhalation Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact Potential risk of transient stinging or redness if accidental eye contact occurs.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] Not available.

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.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] This substance/mixture does not contain any components that are considered to have endocrine disrupting properties.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	**Acute - EL50** OECD 201 Algae >100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Chronic - NOEL** OECD 211 Daphnia 10 mg/l [21 days]
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	**Acute - ErL50** OECD 201 Algae 100 mg/l [72 hours] **Chronic - NOELR** OECD 201 Algae 100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >1000 mg/l [48 hours] **Chronic - NOELR** OECD 211 Daphnia 10 to 1000 mg/l [21 days] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	**Acute - NOEL** OECD 201 Algae ≥100 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >10000 mg/l [48 hours] **Acute - LL50** OECD 203 Fish >100 mg/l [96 hours] **Chronic - NOEL** OECD 211 Daphnia ≥1000 mg/l [21 days]

SECTION 12: Ecological information

Dec-1-ene, homopolymer, hydrogenated	**Acute - EL50** Equivalent to OECD 201 Algae >1000 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >1000 mg/l [48 hours] **Chronic - NOELR** OECD 211 Daphnia 125 mg/l [21 days] **Acute - LL50** OECD 203 Fish >1000 mg/l [96 hours]
Dec-1-ene, trimers, hydrogenated	**Acute - EL50** Equivalent to OECD 201 Algae >1000 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >1000 mg/l [48 hours] **Chronic - NOELR** OECD 211 Daphnia 125 mg/l [21 days] **Acute - LL50** OECD 203 Fish >1000 mg/l [96 hours]
Dec-1-ene, trimers, hydrogenated	**Acute - EL50** OECD 201 Algae >1000 mg/l [72 hours] **Acute - EL50** OECD 202 Daphnia >1000 mg/l [48 hours] **Chronic - NOELR** OECD 211 Daphnia 125 mg/l [21 days] **Acute - LL50** OECD 203 Fish >1000 mg/l [96 hours]

Environmental hazards Not classified as dangerous

12.2 Persistence and degradability

Not expected to be rapidly degradable.

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F 31% [28 days] - Not readily
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301F 31% [28 days] - Inherent

SECTION 12: Ecological information

12.3 Bioaccumulative potential

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

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated	>10	-	High
Dec-1-ene, trimers, hydrogenated	>6.5	-	High
Dec-1-ene, trimers, hydrogenated	>10	-	High

12.4 Mobility in soil

Soil/water partition coefficient

Not available.

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	No	No	No	No	No	No	No
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	No	No	No	No	No	No	No
Dec-1-ene, homopolymer, hydrogenated	No	No	No	No	No	No	No
Dec-1-ene, trimers, hydrogenated	No	No	No	No	No	No	No
Dec-1-ene, trimers, hydrogenated	No	No	No	No	No	No	No

Mobility Spillages may penetrate the soil causing ground water contamination.

Conclusion/Summary The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	
Distillates (petroleum), hydrotreated heavy paraffinic	No	N/A	N/A	No	N/A	N/A	N/A
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	No	N/A	N/A	No	N/A	N/A	N/A
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	No	N/A	N/A	No	N/A	N/A	N/A
Dec-1-ene, homopolymer, hydrogenated	No	N/A	N/A	No	N/A	N/A	N/A
Dec-1-ene, trimers, hydrogenated	No	N/A	N/A	No	N/A	N/A	N/A
Dec-1-ene, trimers, hydrogenated	No	N/A	N/A	No	N/A	N/A	N/A

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	No	No	No	No	No	No	No
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	No	No	No	No	No	No	No
Dec-1-ene, homopolymer, hydrogenated	No	No	No	No	No	No	No
Dec-1-ene, trimers, hydrogenated	No	No	No	No	No	No	No
Dec-1-ene, trimers, hydrogenated	No	No	No	No	No	No	No

SECTION 12: Ecological information

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] This substance/mixture does not contain any components that are considered to have endocrine disrupting properties.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

12.7 Other adverse effects No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Hazardous waste Yes.

European waste catalogue (EWC)

Waste code	Waste designation
13 02 08*	other engine, gear and lubricating oils

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Special precautions 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.

References Commission 2014/955/EU
Directive 2008/98/EC

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

14.6 Special precautions for user Not available.

14.7 Maritime transport in bulk according to IMO instruments Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
benzene	<0.1	5 72
lead powder [particle diameter < 1 mm]	<0.001	72

Labelling Not applicable.

Other regulations

REACH Status The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States inventory (TSCA 8b) All components are active or exempted.

Australia inventory (AIIC) All components are listed or exempted.

Canada inventory 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.

Explosive precursors Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

15.2 Chemical safety assessment A Chemical Safety Assessment has been carried out for one or more of the substances within this mixture. A Chemical Safety Assessment has not been carried out for the mixture itself.

SECTION 16: Other information

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container

SECTION 16: Other information

IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SADT = Self-Accelerating Decomposition Temperature
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative
Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4/ RRN 01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of classifications [CLP/GHS]

Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Aquatic Chronic 3, H412	AQUATIC TOXICITY (CHRONIC) - Category 3

Europe

Full text of abbreviated H statements	H304	May be fatal if swallowed and enters airways.
Full text of classifications [CLP/GHS]	Asp. Tox. 1	ASPIRATION HAZARD - Category 1

History

Date of issue/ Date of revision	16/10/2025.
Date of previous issue	21/08/2025.
Prepared by	Product Stewardship

Indicates information that has changed from previously issued version.

Notice to reader

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SECTION 16: Other information

SECTION 16: Other information

PNECs

Not available

Rabbit - Dermal - LD50
>5000 mg/kg
OECD 402

Rat - Inhalation - LC50 Dusts and mists
>5 mg/l [4 hours]
OECD 403

Rat - Oral - LD50
>5000 mg/kg
OECD 401

Rat - Dermal - LD50
>2000 mg/kg
OECD 402

Rat - Inhalation - LC50 Dusts and mists
>5 mg/l [4 hours]
OECD 403

Rat - Oral - LD50
>5000 mg/kg
OECD 423

Rat - Dermal - LD50
>5000 mg/kg
OECD 402

Rat - Inhalation - LC50 Dusts and mists
>5 mg/l [4 hours]
OECD 403

Rat - Oral - LD50
>5000 mg/kg
OECD 423

Rat - Dermal - LD50
>2000 mg/kg
OECD 402

Rat - Inhalation - LD50 Dusts and mists
>5.2 mg/l [4 hours]
OECD 403

Rat - Oral - LD50
>5000 mg/kg
OECD 423

Rat - Dermal - LD50
>2000 mg/kg
OECD 402

Rat - Inhalation - LD50 Dusts and mists
>5.2 mg/l [4 hours]
OECD 403

Rat - Oral - LD50
>5000 mg/kg
OECD 423

Rat - Dermal - LD50
>2000 mg/kg
OECD 402

Rat - Inhalation - LD50 Dusts and mists
>5.2 mg/l [4 hours]
OECD 403

Flammability

Density and/or Relative density

Density and/or Relative density

Partition coefficient n-octanol/ water (log value)

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based

Kinematic viscosity

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Dec-1-ene, homopolymer, hydrogenated

Dec-1-ene, trimers, hydrogenated

Dec-1-ene, trimers, hydrogenated

Conclusion/Summary [Product]

Skin corrosion/irritation

Result	Product/ingredient name
Rabbit - Skin - Mild irritant OECD 404	Distillates (petroleum), hydrotreated heavy paraffinic
Rabbit - Skin - Non-irritant to skin. OECD 404	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
Rabbit - Skin - Non-irritant to skin. OECD 404	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
Rabbit - Skin - Non-irritant to skin. OECD 404	Dec-1-ene, homopolymer, hydrogenated
Rabbit - Skin - Non-irritant to skin. OECD 404	Dec-1-ene, trimers, hydrogenated
Rabbit - Skin - Non-irritant to skin. OECD 404	Dec-1-ene, trimers, hydrogenated

Conclusion/Summary [Product] Not available.

Serious eye damage/eye irritation

Result	Product/ingredient name
Rabbit - Eyes - Non-irritating to the eyes. OECD 405	Distillates (petroleum), hydrotreated heavy paraffinic
Rabbit - Eyes - Non-irritating to the eyes. OECD 405	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
Rabbit - Eyes - Severe irritant OECD 405	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
Rabbit - Eyes - Non-irritating to the eyes. OECD 405	Dec-1-ene, homopolymer, hydrogenated
Rabbit - Eyes - Non-irritating to the eyes. OECD 405	Dec-1-ene, trimers, hydrogenated
Rabbit - Eyes - Non-irritating to the eyes. OECD 405	Dec-1-ene, trimers, hydrogenated

Conclusion/Summary [Product] Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] Not available.

Respiratory or skin sensitization

Result	Product/ingredient name
Guinea pig - skin OECD 406 Result: Not sensitising	Distillates (petroleum), hydrotreated heavy paraffinic
Guinea pig - skin OECD 406 Result: Not sensitising	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
Guinea pig - skin OECD 406 Result: Not sensitising	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
Guinea pig - skin OECD 406 Result: Not sensitising	Dec-1-ene, homopolymer, hydrogenated
Guinea pig - skin OECD 406 Result: Not sensitising	Dec-1-ene, trimers, hydrogenated

Guinea pig - skin
OECD 406
Result: Not sensitising

Dec-1-ene, trimers, hydrogenated

Skin

Conclusion/Summary [Product] Not available.

Respiratory

Conclusion/Summary [Product] Not available.

Germ cell mutagenicity

Result	Product/ingredient name
In vitro - Bacteria Bacterial Reverse Mutation Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Chromosomal Aberration Test Result: Negative **In vivo - Mammal - species unspecified** Mammalian Erythrocyte Micronucleus Test Result: Negative **In vitro - Mammal - species unspecified** In vitro Mammalian Cell Gene Mutation Test Result: Negative	Distillates (petroleum), hydrotreated heavy paraffinic
In vitro - Bacteria OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Negative **In vitro - Unspecified** OECD [In vitro Mammalian Cell Gene Mutation Test] Result: Negative **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
In vitro - Bacteria OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Chromosomal Aberration Test] Result: Positive **In vivo - Mammal - species unspecified** OECD [Mammalian Erythrocyte Micronucleus Test] Result: Negative **In vitro - Mammal - species unspecified** OECD [In vitro Mammalian Cell Gene Mutation Test] Result: Negative	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
In vitro - Bacteria OECD [Bacterial Reverse Mutation Test] Result: Negative **In vitro - Mammal - species unspecified**	Dec-1-ene, homopolymer, hydrogenated

OECD [In vitro Mammalian Chromosomal Aberration Test]
Result: Negative

In vivo - Mammal - species unspecified
OECD [Mammalian Erythrocyte Micronucleus Test]
Result: Negative

In vitro - Bacteria — Dec-1-ene, trimers, hydrogenated
OECD [Bacterial Reverse Mutation Test]
Result: Negative

In vitro - Mammal - species unspecified
OECD [In vitro Mammalian Chromosomal Aberration Test]
Result: Negative

In vivo - Mammal - species unspecified
OECD [Mammalian Erythrocyte Micronucleus Test]
Result: Negative

In vitro - Bacteria — Dec-1-ene, trimers, hydrogenated
OECD [Bacterial Reverse Mutation Test]
Result: Negative

In vitro - Mammal - species unspecified
OECD [In vitro Mammalian Chromosomal Aberration Test]
Result: Negative

In vivo - Mammal - species unspecified
OECD [Mammalian Erythrocyte Micronucleus Test]
Result: Negative

Conclusion/Summary [Product] Not available.

Carcinogenicity

Result	Product/ingredient name
Mouse - Dermal - Unspecified OECD 451 Result: Negative	Distillates (petroleum), hydrotreated heavy paraffinic

Conclusion/Summary [Product] Not available.

Reproductive toxicity

Result	Product/ingredient name
Rat - Oral OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative	Distillates (petroleum), hydrotreated heavy paraffinic
Rat - Oral OECD 421 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
Rat - Oral OECD 415 Maternal toxicity: Negative Fertility effects: Negative Developmental: Negative	Dec-1-ene, homopolymer, hydrogenated
Rat - Oral OECD 415 Maternal toxicity: Negative Fertility effects: Negative	Dec-1-ene, trimers, hydrogenated

Developmental: Negative

Rat - Oral Dec-1-ene, trimers, hydrogenated
OECD 415
Maternal toxicity: Negative
Fertility effects: Negative
Developmental: Negative

Conclusion/Summary [Product] Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Result	Product/ingredient name
ASPIRATION HAZARD - Category 1	Distillates (petroleum), hydrotreated heavy paraffinic
ASPIRATION HAZARD - Category 1	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
ASPIRATION HAZARD - Category 1	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
ASPIRATION HAZARD - Category 1	Dec-1-ene, homopolymer, hydrogenated
ASPIRATION HAZARD - Category 1	Dec-1-ene, trimers, hydrogenated
ASPIRATION HAZARD - Category 1	Dec-1-ene, trimers, hydrogenated

Information on likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Result	Product/ingredient name
Acute - EL50 OECD 201 Algae >100 mg/l [72 hours]	Distillates (petroleum), hydrotreated heavy paraffinic
Acute - EL50 OECD 202 Daphnia >10000 mg/l [48 hours]	
Acute - LL50 OECD 203 Fish >100 mg/l [96 hours]	
Chronic - NOEL OECD 201 Algae ≥100 mg/l [72 hours]	
Chronic - NOEL OECD 211 Daphnia 10 mg/l [21 days]	
Acute - ErL50 OECD 201 Algae 100 mg/l [72 hours]	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
Chronic - NOELR OECD 201 Algae 100 mg/l [72 hours]	
Acute - EL50 OECD 202 Daphnia >1000 mg/l [48 hours]	
Chronic - NOELR OECD 211	

Daphnia
10 to 1000 mg/l [21 days]

Acute - LL50
OECD 203
Fish
>100 mg/l [96 hours]

Acute - NOEL
OECD 201
Algae
≥100 mg/l [72 hours]

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Acute - EL50
OECD 202
Daphnia
>10000 mg/l [48 hours]

Acute - LL50
OECD 203
Fish
>100 mg/l [96 hours]

Chronic - NOEL
OECD 211
Daphnia
≥1000 mg/l [21 days]

Acute - EL50
Equivalent to OECD 201
Algae
>1000 mg/l [72 hours]

Dec-1-ene, homopolymer, hydrogenated

Acute - EL50
OECD 202
Daphnia
>1000 mg/l [48 hours]

Chronic - NOELR
OECD 211
Daphnia
125 mg/l [21 days]

Acute - LL50
OECD 203
Fish
>1000 mg/l [96 hours]

Acute - EL50
Equivalent to OECD 201
Algae
>1000 mg/l [72 hours]

Dec-1-ene, trimers, hydrogenated

Acute - EL50
OECD 202
Daphnia
>1000 mg/l [48 hours]

Chronic - NOELR
OECD 211
Daphnia
125 mg/l [21 days]

Acute - LL50
OECD 203
Fish
>1000 mg/l [96 hours]

Acute - EL50
OECD 201
Algae
>1000 mg/l [72 hours]

Dec-1-ene, trimers, hydrogenated

Acute - EL50

OECD 202
Daphnia
>1000 mg/l [48 hours]

Chronic - NOELR
OECD 211
Daphnia
125 mg/l [21 days]

Acute - LL50
OECD 203
Fish
>1000 mg/l [96 hours]

Result	Product/ingredient name
OECD 301F 31% [28 days] - Not readily	Distillates (petroleum), hydrotreated heavy paraffinic
OECD 301F 31% [28 days] - Inherent	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based

Soil/water partition coefficient

Not available.

Results of PMT and vPvM assessment

vM	vP	vPvM	T	M	P	PMT	Product/ingredient name
No	No	No	No	No	No	No	Distillates (petroleum), hydrotreated heavy paraffinic
No	No	No	No	No	No	No	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
No	No	No	No	No	No	No	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
No	No	No	No	No	No	No	Dec-1-ene, homopolymer, hydrogenated
No	No	No	No	No	No	No	Dec-1-ene, trimers, hydrogenated
No	No	No	No	No	No	No	Dec-1-ene, trimers, hydrogenated

Mobility

Spillages may penetrate the soil causing ground water contamination.

Conclusion/Summary

The product does not meet the criteria to be considered as a PMT or vPvM.

Regulation (EC) No. 1907/2006 [REACH]

	vP	vPvB	T	B	P	PBT	Product/ingredient name
N/A	N/A	N/A	No	N/A	N/A	No	Distillates (petroleum), hydrotreated heavy paraffinic
N/A	N/A	N/A	No	N/A	N/A	No	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
N/A	N/A	N/A	No	N/A	N/A	No	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
N/A	N/A	N/A	No	N/A	N/A	No	Dec-1-ene, homopolymer, hydrogenated
N/A	N/A	N/A	No	N/A	N/A	No	Dec-1-ene, trimers, hydrogenated
N/A	N/A	N/A	No	N/A	N/A	No	Dec-1-ene, trimers, hydrogenated

Regulation (EC) No. 1272/2008 [CLP]

	vP	vPvB	T	B	P	PBT	Product/ingredient name
No	No	No	No	No	No	No	Distillates (petroleum), hydrotreated heavy paraffinic
No	No	No	No	No	No	No	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based
No	No	No	No	No	No	No	Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based
No	No	No	No	No	No	No	Dec-1-ene, homopolymer,

							hydrogenated
No	No	No	No	No	No	No	Dec-1-ene, trimers, hydrogenated
No	No	No	No	No	No	No	Dec-1-ene, trimers, hydrogenated

The product does not meet the criteria to be considered as a PBT or vPvB.

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]

Not available.

This substance/mixture does not contain any components that are considered to have endocrine disrupting properties.

Conclusion/Summary [Product]

No known significant effects or critical hazards.

12.7 Other adverse effects