

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Product name	Castrol EDGE 0W-40
Product code	463998-DE01
SDS #	463998
Product type	Liquid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/ mixture	Engine oils. 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	Lubricants UK Limited, Chertsey Road, Sunbury On Thames, Middlesex, TW16 7BP
	+44 (0)345 600 8125
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

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	1/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.	Language	ENGLISH		

SECTION 2: Hazards identification

Containers to be fitted with child-resistant fastenings	Not applicable.
Tactile warning of danger	Not applicable.
2.3 Other hazards	
Results of PBT and vPvB assessment	Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.
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.
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 UK (GB) REACH #: UK-01-1759217276-5 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥50 - ≤75	Asp. Tox. 1, H304	-	[1]
Dec-1-ene, trimers, hydrogenated	REACH #: 01-2119493949-12 EC: 500-393-3 CAS: 157707-86-3	≤10	Asp. Tox. 1, H304	-	[1]
Dec-1-ene, trimers, hydrogenated	REACH #: 01-2119486452-34 EC: 500-393-3 CAS: 157707-86-3	≤5	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]

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.

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	2/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.	Language	ENGLISH		

SECTION 4: First aid measures

Inhalation	If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
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	No known significant effects or critical hazards.

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".

Product name Castrol EDGE 0W-40

Product code 463998-DE01

Page: 3/18

Version 1 **Date of issue** 19 December 2024

Format United Kingdom (UK)

Language ENGLISH

Date of previous issue No previous validation.

(United Kingdom)

SECTION 6: Accidental release measures

6.2 Environmental precautions

Avoid dispersal of spill 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.

7.3 Specific end use(s)

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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.

Derived No Effect Level

No DNELs/DMELs available.

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

Product name Castrol EDGE 0W-40

Product code 463998-DE01

Page: 4/18

Version 1 **Date of issue** 19 December 2024

Format United Kingdom (UK)

Language ENGLISH

Date of previous issue No previous validation.

(United Kingdom)

SECTION 8: Exposure controls/personal protection

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:

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

Product name Castrol EDGE 0W-40

Product code 463998-DE01

Page: 5/18

Version 1 **Date of issue** 19 December 2024

Format United Kingdom (UK)

Language ENGLISH

Date of previous issue No previous validation.

(United Kingdom)

SECTION 8: Exposure controls/personal protection

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

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

9.1 Information on basic physical and chemical properties

- Physical state Liquid.
Colour Amber.
Odour Not available.
Odour threshold Not available.
Melting point/freezing point Not available.
Initial boiling point and boiling range Not available.
Flammability Not available.
Lower and upper explosion limit Not available.
Flash point Closed cup: 200.5°C (392.9°F) [Pensky-Martens ASTM D 93]
Auto-ignition temperature

Ingredient name	°C	°F	Method
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, 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
Dec-1-ene, homopolymer, hydrogenated	343 to 369	649.4 to 696.2	ASTM D 2159
bis(nonylphenyl)amine	440	824	EU A.15

- Decomposition temperature Not available.
pH Not applicable.

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	6/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.	Language	ENGLISH		

SECTION 9: Physical and chemical properties

Kinematic viscosity	Kinematic: 73.9 mm²/s (73.9 cSt) at 40°C Kinematic: 13.1 to 15 mm²/s (13.1 to 15 cSt) at 100°C																																																
Solubility	<table><tr><th>Media</th><th>Result</th></tr><tr><td>water</td><td>Not soluble</td></tr></table>	Media	Result	water	Not soluble																																												
Media	Result																																																
water	Not soluble																																																
Partition coefficient n-octanol/ water (log value)	Not applicable.																																																
Vapour pressure	<table><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapour Pressure at 20°C</th><th colspan="3">Vapour pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td>Distillates (petroleum), hydrotreated heavy paraffinic</td><td><0.07501</td><td><0.01</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr><tr><td>Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated</td><td><0.0041</td><td><0.00055</td><td>ASTM E 1194-87</td><td></td><td></td><td></td></tr><tr><td>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</td><td><0.07501</td><td><0.01</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr><tr><td>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</td><td><0.07501</td><td><0.01</td><td>ASTM D 5191</td><td></td><td></td><td></td></tr><tr><td>bis(nonylphenyl)amine</td><td><0.01</td><td><0.0013</td><td>EU A.4</td><td>0.0019</td><td>0.00025</td><td>EU A.4</td></tr></table>	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191				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
Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C																																													
	mm Hg	kPa	Method	mm Hg	kPa	Method																																											
Distillates (petroleum), hydrotreated heavy paraffinic	<0.07501	<0.01	ASTM D 5191																																														
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																																											
Density and/or Relative density	<1000 kg/m³ (<1 g/cm³) at 15°C																																																
Relative vapour density	Not available.																																																
Particle characteristics																																																	
Median particle size	Not applicable.																																																
9.2 Other information																																																	
Evaporation rate	Not available.																																																
Explosive properties	Not available.																																																
Oxidising properties	Not available.																																																
Pour point	-45 °C																																																

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.

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	7/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.				
				Language	ENGLISH

SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result / Route	Test authority / Number	Species	Dose	Exposure	Remarks	
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	OECD	403	Rat	>5 mg/l	4 hours	Based on studies with similar substances.
	LD50 Dermal	OECD	402	Rabbit	>5000 mg/kg	-	Based on studies with similar substances.
	LD50 Oral	OECD	401	Rat	>5000 mg/kg	-	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	LD50 Dermal	OECD	402	Rat	>2000 mg/kg	-	Based on studies with similar substances.
	LD50 Oral	OECD	423	Rat	>5000 mg/kg	-	Based on studies with similar substances.
	LD50 Inhalation Dusts and mists	OECD	403	Rat	>5.2 mg/l	4 hours	-
Dec-1-ene, homopolymer, hydrogenated	LD50 Dermal	OECD	402	Rat	>2000 mg/kg	-	Based on studies with similar substances.
	LD50 Oral	OECD	423	Rat	>5000 mg/kg	-	Based on studies with similar substances.
	LD50 Inhalation Dusts and mists	OECD	403	Rat	>5.2 mg/l	4 hours	-
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	OECD	403	Rat	>5 mg/l	4 hours	Based on studies with similar substances.
	LD50 Dermal	OECD	402	Rat	>2000 mg/kg	-	Based on studies with similar substances.
	LD50 Oral	OECD	401	Rat	>5000 mg/kg	-	Based on studies with similar substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	OECD	403	Rat	>5 mg/l	4 hours	Based on studies with similar substances.
	LD50 Dermal	OECD	402	Rat	>5000 mg/kg	-	Based on
Product name Castrol EDGE 0W-40				Product code	463998-DE01		
Version 1	Date of issue 19 December 2024			Format	United Kingdom (UK) (United Kingdom)		
Date of previous issue		No previous validation.					
					Page: 8/18		
					Language ENGLISH		

SECTION 11: Toxicological information

							studies with similar substances.
LD50 Oral	OECD	423	Rat	>5000 mg/kg	-		Based on studies with similar substances.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Test authority / Test number		Species	Route / Result		Test concentration	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD	405	Rabbit	Eyes - Non-irritating to the eyes.	-		Based on studies with similar substances.
	OECD	404	Rabbit	Skin - Mild irritant	-		Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	OECD	405	Rabbit	Eyes - Non-irritating to the eyes.	-		Based on studies with similar substances.
	OECD	404	Rabbit	Skin - Non-irritant to skin.	-		-
Dec-1-ene, homopolymer, hydrogenated	OECD	405	Rabbit	Eyes - Non-irritating to the eyes.	-		-
	OECD	404	Rabbit	Skin - Non-irritant to skin.	-		-
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	OECD	405	Rabbit	Eyes - Non-irritating to the eyes.	-		Based on studies with similar substances.
	OECD	404	Rabbit	Skin - Non-irritant to skin.	-		Based on studies with similar substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD	405	Rabbit	Eyes - Severe irritant	-		Based on studies with similar substances.
	OECD	404	Rabbit	Skin - Non-irritant to skin.	-		Based on studies with similar substances.

Sensitiser

Product/ingredient name	Route	Test authority / Test number		Species	Result	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	skin	OECD	406	Guinea pig	Not sensitising	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	skin	OECD	406	Guinea pig	Not sensitising	-
Dec-1-ene,	skin	OECD	406	Guinea pig	Not sensitising	-

Product name Castrol EDGE 0W-40**Product code** 463998-DE01**Page:** 9/18**Version** 1 **Date of issue** 19 December 2024**Format** United Kingdom (UK)**Language** ENGLISH**Date of previous issue** No previous validation.

(United Kingdom)

SECTION 11: Toxicological information

homopolymer, hydrogenated						
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	skin	OECD	406	Guinea pig	Not sensitising	Based on studies with similar substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	skin	OECD	406	Guinea pig	Not sensitising	Based on studies with similar substances.

GERM CELL MUTAGENICITY

Product/ingredient name	Test authority / Test number	Cell		Type	Result	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	471 Bacterial Reverse Mutation Test	-	Experiment: In vitro	Subject: Bacteria	Negative	Based on studies with similar substances.
	473 In vitro Mammalian Chromosomal Aberration Test	-	Experiment: In vitro	Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
	476 In vitro Mammalian Cell Gene Mutation Test	-	Experiment: In vitro	Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
	474 Mammalian Erythrocyte Micronucleus Test	-	Experiment: In vivo	Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	OECD 471 Bacterial Reverse Mutation Test	-	Experiment: In vitro	Subject: Bacteria	Negative	Based on studies with similar substances.
	OECD 473 In vitro Mammalian Chromosomal Aberration 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.
Dec-1-ene, homopolymer, hydrogenated	OECD 471 Bacterial Reverse Mutation Test	-	Experiment: In vitro	Subject: Bacteria	Negative	-
	OECD 473 In vitro Mammalian Chromosomal Aberration 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.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	OECD 471 Bacterial Reverse Mutation Test	-	Experiment: In vitro	Subject: Bacteria	Negative	Based on studies with similar substances.

Product name Castrol EDGE 0W-40**Product code** 463998-DE01**Page:** 10/18**Version** 1 **Date of issue** 19 December 2024**Format** United Kingdom (UK)
(United Kingdom)**Language** ENGLISH**Date of previous issue** No previous validation.

SECTION 11: Toxicological information

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 473 In vitro Mammalian Chromosomal Aberration Test	-	Experiment: In vitro	Subject: Mammal - species unspecified	Negative	Based on studies with similar substances.
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	-	Experiment: In vitro	Subject: 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.
	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.

Carcinogenicity

Product/ingredient name	Test authority / Test number		Species	Route	Exposure	Result	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD	451	Mouse	Dermal	-	Negative	Based on studies with similar substances.

Reproductive toxicity

Product/ingredient name	Test authority / Test number		Species	Route	Exposure	Developmental	Maternal toxicity	Fertility	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD	421	Rat	Oral	-	Negative	Negative	Negative	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	OECD	415	Rat	Oral	-	Negative	Negative	Negative	-
Dec-1-ene, homopolymer, hydrogenated	OECD	415	Rat	Oral	-	Negative	Negative	Negative	-
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD	421	Rat	Oral	-	Negative	Negative	Negative	Based on studies with similar substances.

Aspiration hazard

Product name		Castrol EDGE 0W-40		Product code		463998-DE01		Page: 11/18							
Version		1		Date of issue		19 December 2024		Format		United Kingdom (UK) (United Kingdom)		Language		ENGLISH	
Date of previous issue						No previous validation.									

SECTION 11: Toxicological information

Product/ingredient name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	ASPIRATION HAZARD - Category 1
Dec-1-ene, homopolymer, hydrogenated	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

Conclusion/Summary Not classified. Based on available data, the classification criteria are not met.

Conclusion/Summary Not available.

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 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation No specific data.

Ingestion No specific data.

Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking

Eye contact No specific data.

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

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.

11.2.2 Other information

Not available.

Product name Castrol EDGE 0W-40

Product code 463998-DE01

Page: 12/18

Version 1 **Date of issue** 19 December 2024

Format United Kingdom (UK)

Language ENGLISH

Date of previous issue No previous validation.

(United Kingdom)

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Test authority / Test number		Species	Type / Result	Exposure	Effects	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD	201	Algae	Acute EL50 >100 mg/l	72 hours	-	Based on studies with similar substances.
	OECD	202	Daphnia	Acute EL50 >10000 mg/l	48 hours	-	Based on studies with similar substances.
	OECD	203	Fish	Acute LL50 >100 mg/l	96 hours	-	Based on studies with similar substances.
	OECD	201	Algae	Chronic NOEL ≥100 mg/l	72 hours	-	Based on data available for this or related materials.
	OECD	211	Daphnia	Chronic NOEL 10 mg/l	21 days	-	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	OECD	201	Algae	Acute EL50 >1000 mg/l	72 hours	-	Based on studies with similar substances.
	OECD	202	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	Based on studies with similar substances.
	OECD	203	Fish	Acute LL50 >1000 mg/l	96 hours	-	-
	OECD	211	Daphnia	Chronic NOELR 125 mg/l	21 days	-	Based on studies with similar substances.
Dec-1-ene, homopolymer, hydrogenated	Equivalent to OECD	201	Algae	Acute EL50 >1000 mg/l	72 hours	-	-
	OECD	202	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	-
	OECD	203	Fish	Acute LL50 >1000 mg/l	96 hours	-	-
	OECD	211	Daphnia	Chronic NOELR 125 mg/l	21 days	-	-
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	OECD	202	Daphnia	Acute EL50 >1000 mg/l	48 hours	-	Based on studies with similar substances.
	OECD	201	Algae	Acute ErL50 100 mg/l	72 hours	-	Based on studies

SECTION 12: Ecological information

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD	203	Fish	Acute LL50 >100 mg/l	96 hours	-	with similar substances.
							Based on studies with similar substances.
	OECD	201	Algae	Chronic NOELR 100 mg/l	72 hours	-	Based on studies with similar substances.
	OECD	211	Daphnia	Chronic NOELR 10 to 1000 mg/l	21 days	-	Based on studies with similar substances.
	OECD	202	Daphnia	Acute EL50 >10000 mg/l	48 hours	-	Based on studies with similar substances.
	OECD	203	Fish	Acute LL50 >100 mg/l	96 hours	-	Based on studies with similar substances.
	OECD	201	Algae	Acute NOEL ≥100 mg/l	72 hours	-	-
	OECD	211	Daphnia	Chronic NOEL ≥1000 mg/l	21 days	-	Based on studies with similar substances.

Environmental hazards Not classified as dangerous

12.2 Persistence and degradability

Not expected to be rapidly degradable.

Product/ingredient name	Test authority / Test number	Result - Exposure	Remarks
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	Based on studies with similar substances.
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301F	31 % - Inherent - 28 days	Based on studies with similar substances.

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, trimers, hydrogenated	>10	-	High
Dec-1-ene, trimers, hydrogenated	>6.5	-	High

12.4 Mobility in soil

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	14/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.				
				Language	ENGLISH

SECTION 12: Ecological information

Soil/water partition coefficient (K _{oc})	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Product does not meet the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII.

12.6 Endocrine disrupting properties	Not available.
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.
-----------------------------------	----------------

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	15/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.	Language	ENGLISH		

SECTION 14: Transport information

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	<0.0001	5 72
lead powder [particle diameter < 1 mm]	<0.0001	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 (AIC)

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 (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

EU - Water framework directive - Priority substances

None of the components are 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 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 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	19/12/2024.
Date of previous issue	No previous validation.
Prepared by	Product Stewardship Group

Indicates information that has changed from previously issued version.

Notice to reader

Product name	Castrol EDGE 0W-40	Product code	463998-DE01	Page:	17/18
Version	1	Date of issue	19 December 2024	Format	United Kingdom (UK) (United Kingdom)
Date of previous issue	No previous validation.	Language	ENGLISH		

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.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Product name Castrol EDGE 0W-40		Product code 463998-DE01	Page: 18/18
Version 1	Date of issue 19 December 2024	Format United Kingdom (UK) (United Kingdom)	Language ENGLISH
Date of previous issue No previous validation.			