



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.10.2022

Version number 15

Revision: 11.10.2022

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

- **1.1 Product identifier**
- **Trade name:** Lubricating Oil ISO VG 220
- **Article number:** 542690-80, 542690-81
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Lubricating oil
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**
Alfa Laval Technologies AB
SE-221 00 Lund
Sweden
+46 46 36 65 00
info.se@alfalaval.com
- **Further information obtainable from:**
For further questions regarding the safety data sheet, please contact your local Alfa Laval Sales Company which you find at www.alfalaval.com or in section 16 "Other Information" in the end of the safety data sheet
- **1.4 Emergency telephone number:**
For immediate, life-threatening emergencies, call 999. For health advice and information (24h) dial 111 (NHS direct).

In Europe: Call 112 and ask for poison information.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements**
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** The product is not, nor contains, a substance that is, PBT.
- **vPvB:** The product is not, nor contains a substance that is, vPvB.

Determination of endocrine-disrupting properties

CAS: 128-37-0	2,6-di-tert-butyl-p-cresol
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List II



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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 128-37-0 EINECS: 204-881-4 Reg.nr.: 01-2119565113-46	2,6-di-tert-butyl-p-cresol Aquatic Acute 1, H400; Aquatic Chronic 1, H410	0.25-<1%
EC number: 701-177-3 Reg.nr.: 01-2119488991-20	Oleic acid derivative Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H332; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	0.1-<1%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** Wash contaminated clothing before reuse.

· **After inhalation:** Supply fresh air; consult doctor if symptoms persist.

· **After skin contact:**

Wash with water and soap.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water and consult a doctor.

· **After swallowing:**

Rinse the mouth with water.

Do NOT induce vomiting.

May cause aspiration when swallowing.

Contact a doctor/physician.

· 4.2 Most important symptoms and effects, both acute and delayed

High pressure injection under skin: local necrosis.

· 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

Foam

Fire-extinguishing powder

Carbon dioxide

Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** Not applicable.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Carbon monoxide (CO)

Hydrocarbons

· 5.3 Advice for firefighters

· **Protective equipment:**

Wear self-contained respiratory protective device.

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Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

Do not breathe vapour.

6.2 Environmental precautions:

Avoid release to the environment.

Do not allow to enter sewers/ surface or ground water.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Send for recovery or disposal in suitable receptacles.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid the formation of oil haze.

The usual precautionary measures are to be adhered to when handling chemicals.

See Section 8 for information on personal protection equipment.

When using do not eat, drink or smoke.

Information about fire - and explosion protection: No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:**

Store in a well-ventilated place. Keep container tightly closed.

Store in a dry place.

Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from reducing agents.

Further information about storage conditions: Protect from humidity and water.**7.3 Specific end use(s)**

Lubricating oil

Professional use only.

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 128-37-0 2,6-di-tert-butyl-p-cresolWEL Long-term value: 10 mg/m³

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Appropriate engineering controls No further data; see item 7.

· Individual protection measures, such as personal protective equipment

· General protective and hygienic measures:

Use only in well-ventilated areas.

Wash hands before breaks and at the end of work.

· Respiratory protection: Not necessary if room is well-ventilated.

· Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

polymer laminate

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Eye/face protection Wear eye/face protection.

· Body protection: Working clothes

· Environmental exposure controls Do not allow to enter sewers/ surface or ground water.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Fluid

· Colour:

Colourless

· Odour:

Characteristic

· Odour threshold:

Not determined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

Undetermined.

· Flammability

Not applicable.

· Lower and upper explosion limit

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

250 °C

· Decomposition temperature:

Not determined.

· pH

Not determined.

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· Viscosity:	
· Kinematic viscosity at 40 °C	220 mm ² /s
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	< 0.01 kPa
· Density and/or relative density	
· Density at 20 °C:	0.86 g/cm ³ (DIN EN ISO 12185)
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	
· Appearance:	Clear
· Form:	Liquid
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Drip point:	
· Oxidising properties	Not applicable.
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** The material is stable under recommended storage and handling conditions.
- **10.2 Chemical stability**
Stable under normal temperature conditions and under recommended usage and storage.
- **Thermal decomposition / conditions to be avoided:**
To avoid thermal decomposition do not overheat.

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- Formation of toxic gases is possible during heating or in case of fire.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** High temperature
- **10.5 Incompatible materials:** Reacts with acids, alkalis and oxidising agents.
- **10.6 Hazardous decomposition products:**
Poisonous gases/vapours
No further information, refer to section 5.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Oral	LD50	>2,930 mg/kg (Rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (Rat) (OECD 402)

Oleic acid derivative

Oral	LD50	>5,000 mg/kg (Rat)
Inhalative	LC50 (4 h)	1.37 mg/L (Rat)

- **Skin corrosion/irritation**
Prolonged and / or repeated skin contact may cause irritation.
Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Contact with eyes may result in mild irritation.
Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **Acute effects (acute toxicity, irritation and corrosivity)**
High pressure injection under skin: local necrosis.
Low acute toxicity, but aspiration following ingestion and vomiting may cause severe and potentially fatal chemical pneumonia.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**
Endocrine disrupting properties from <https://edlists.org>

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

List II

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

EC50 (48 h)	0.61 mg/L (Daphnia) (OECD 202)
NOEC - No observed effect concentration	>0.39 mg/l (Daphnia) 21 d

Oleic acid derivative

LC50 (96 h)	6.8 mg/L (Fish)
EC50 (48 h)	0.43 mg/L (Daphnia)
EC50 (72 h)	6.3 mg/L (Algae)
NOEC - No observed effect concentration	0.91 mg/l (Algae) 72 h

12.2 Persistence and degradability

The product is not easily, but potentially biodegradable.

CAS: 128-37-0 2,6-di-tert-butyl-p-cresol

Biodegradability | 30 % (OECD 302C)

12.3 Bioaccumulative potential Contains components with the potential to bioaccumulate.

12.4 Mobility in soil Low solubility, product floats on water. Absorbs to soil particles.

12.5 Results of PBT and vPvB assessment
PBT: The product is not, nor contains, a substance that is, PBT.

vPvB: The product is not, nor contains a substance that is, vPvB.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

12.7 Other adverse effects

Spills may form a film on the water surface. This film may cause physical damage to aquatic organisms and reduce oxygen transfer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation

Must be specially treated adhering to official regulations.

Hand over to hazardous waste disposers.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

yes European waste catalogue

The European Waste Catalogue (EWC) waste codes do not refer to product but to origin. The manufacturer is therefore unable to quote a waste code for products which are used in various industries. Any codes shown should be regarded as a recommendation to the user.

13 00 00	OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19)
13 02 00	waste engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils

Uncleaned packaging:
Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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SECTION 14: Transport information

- | | |
|--|-----------------|
| · 14.1 UN number or ID number
· ADR, ADN, IMDG, IATA | Not regulated |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Not regulated |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Not regulated |
| · 14.4 Packing group
· ADR, IMDG, IATA | Not regulated |
| · 14.5 Environmental hazards:
· Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Not regulated |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
EU Regulation (EC) no.1907/2006 (GB REACH)
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
None of the ingredients is listed.
- **Regulation (EC) No 273/2004 on drug precursors**
None of the ingredients is listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

LIMITATION OF LIABILITY

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

Please contact your local Alfa Laval Sales Company for further questions.

www.alfalaval.com

• Relevant phrases

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

• Department issuing SDS: Alfa Laval Sustainability Environment

• Contact:

Please contact your local Alfa Laval Sales Company for further questions.

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The Netherlands: benelux.info@alfalaval.com
New Zealand: newzealand.info@alfalaval.com
Norway: info.no@alfalaval.com
Peru: ventas.peru@alfalaval.com
Philippines: philippines.info@alfalaval.com
Poland: poland.info@alfalaval.com
Portugal: portugal.info@alfalaval.com
Qatar: alme.marketing@alfalaval.com
Romania: romania.info@alfalaval.com
Russia: moscow.response@alfalaval.com
Singapore: al.singapore@alfalaval.com
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Slovenia: slovenija.info@alfalaval.com
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Spain: info.spain@alfalaval.com
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• **Date of previous version:** 01.07.2021

• **Version number of previous version:** 14

• **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

• *** Data compared to the previous version altered.**