



## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 31.10.2022

Version number 13 (replaces version 12)

Revision: 31.10.2022

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

- **1.1 Product identifier**
- **Trade name:** Lubricating Oil ISO VG 320
- **Article number:** 54269084, 54269085
- **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](http://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**  
Prolonged and/or repeated skin contact may cause irritation.  
Slight eye irritation may occur upon contact with the eyes.
- **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.

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**Determination of endocrine-disrupting properties**

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

List II

### SECTION 3: Composition/information on ingredients

**3.2 Mixtures**
**Description:** Synthetic base oil with additives.

**Dangerous components:**

|   |  |          |
|---|--|----------|
| CAS: 128-37-0<br>EINECS: 204-881-4<br>Reg.nr.: 01-2119565113-46 | 2,6-di-tert-butyl-p-cresol<br>Aquatic Acute 1, H400; Aquatic Chronic 1, H410   | 0.25-<1% |
| EC number: 701-177-3<br>Reg.nr.: 01-2119488991-20               | Oleic acid derivative<br>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:** Call a POISON CENTER/doctor if you feel unwell.

**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.

Contact a doctor/physician.

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

High pressure injection under skin: local necrosis.

Prolonged and/or repeated skin contact may cause irritation.

Slight eye irritation may occur upon contact with the eyes.

**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

Water spray

Use fire extinguishing methods suitable to surrounding conditions.

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

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- **5.2 Special hazards arising from the substance or mixture**  
No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Cool endangered receptacles with water spray.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.  
Do not breathe vapour.
- **6.2 Environmental precautions:**  
Avoid release to the environment.  
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.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.
- **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**  
Ensure adequate ventilation  
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:**  
Keep away from heat and direct sunlight.  
Store in a dry place.  
Keep container tightly closed.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
- **Recommended storage temperature:** 5 - 35 °C (41 - 95 °F)
- **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-cresol**

WEL | Long-term value: 10 mg/m<sup>3</sup>

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

· **8.2 Exposure controls**

· **Appropriate engineering controls** Use only in well-ventilated areas.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Do not carry product impregnated cleaning cloths in trouser pockets.

Take off contaminated clothing.

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

In case of insufficient ventilation, wear suitable respiratory equipment.

· **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

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:** Wear protective clothing.

· **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 (ISO 2592)

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|  |   |
|--|---|
| · <b>Decomposition temperature:</b>  | Not determined.                               |
| · <b>pH</b>  | Not determined.                               |
| · <b>Viscosity:</b>  |   |
| · <b>Kinematic viscosity at 40 °C</b>  | 320 mm <sup>2</sup> /s                        |
| · <b>Dynamic:</b>  | Not determined.                               |
| · <b>Solubility</b>  |   |
| · <b>water:</b>  | Not miscible or difficult to mix.             |
| · <b>Partition coefficient n-octanol/water (log value)</b>                         | Not determined.                               |
| · <b>Vapour pressure:</b>  | < 0.01 @20 °C kPa                             |
| · <b>Density and/or relative density</b>   |   |
| · <b>Density at 20 °C:</b>   | 0.85 g/cm <sup>3</sup> (DIN EN ISO 12185)     |
| · <b>Relative density</b>  | Not determined.                               |
| · <b>Vapour density</b>  | Not determined.                               |
| · <b>9.2 Other information</b>   |   |
| · <b>Appearance:</b>   |   |
| · <b>Form:</b>   | Liquid  |
| · <b>Auto-ignition temperature:</b>  | Product is not selfigniting.                  |
| · <b>Explosive properties:</b>   | Product does not present an explosion hazard. |
| · <b>Change in condition</b>   |   |
| · <b>Drip point:</b>   |   |
| · <b>Oxidising properties</b>  | Not applicable.                               |
| · <b>Evaporation rate</b>  | Not determined.                               |
| · <b>Information with regard to physical hazard classes</b>                        |   |
| · <b>Explosives</b>  | Void  |
| · <b>Flammable gases</b>   | Void  |
| · <b>Aerosols</b>  | Void  |
| · <b>Oxidising gases</b>   | Void  |
| · <b>Gases under pressure</b>  | Void  |
| · <b>Flammable liquids</b>   | Void  |
| · <b>Flammable solids</b>  | Void  |
| · <b>Self-reactive substances and mixtures</b>                                     | Void  |
| · <b>Pyrophoric liquids</b>  | Void  |
| · <b>Pyrophoric solids</b>   | Void  |
| · <b>Self-heating substances and mixtures</b>                                      | Void  |
| · <b>Substances and mixtures, which emit flammable gases in contact with water</b> | Void  |
| · <b>Oxidising liquids</b>   | Void  |
| · <b>Oxidising solids</b>  | Void  |
| · <b>Organic peroxides</b>   | Void  |
| · <b>Corrosive to metals</b>   | Void  |
| · <b>Desensitised explosives</b>   | Void  |

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** Material is stable under normal conditions.
- **10.2 Chemical stability**  
Stable under normal temperature conditions and under recommended usage and storage.

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- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **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:** No dangerous decomposition products known.

### 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.

- **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.

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

|             |                                |
|-------------|--------------------------------|
| EC50 (48 h) | 0.61 mg/L (Daphnia) (OECD 202) |
|-------------|--------------------------------|

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|   |                              |
|---|------------------------------|
| NOEC - No observed effect concentration | >0.39 mg/l (Daphnia)<br>21 d |
| <b>Oleic acid derivative</b>            |                              |
| 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)<br>72 h    |

· **12.2 Persistence and degradability**

**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**

The product is not expected to be mobile 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**

Hand over to hazardous waste disposers.  
Delivery of waste oil to officially authorised collectors only.  
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<br>· ADR, ADN, IMDG, IATA                | Not regulated   |
| · 14.2 UN proper shipping name<br>· ADR, ADN, IMDG, IATA               | Not regulated   |
| · 14.3 Transport hazard class(es)<br>· ADR, ADN, IMDG, IATA<br>· Class | Not regulated   |
| · 14.4 Packing group<br>· ADR, IMDG, IATA                              | Not regulated   |
| · 14.5 Environmental hazards:  | Not applicable. |
| · 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 1272/2008 (GB CLP)  
EU Regulation (EC) no.1907/2006 (UK REACH)  
· **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](http://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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· **Date of previous version:** 13.09.2021

· **Version number of previous version:** 12

· **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.**