



# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/31/2023

Version 16

Reviewed on 07/31/2023

## 1 Identification

- **Product identifier**
- **Trade name:** Lubricating Oil ISO VG 220
- **Article number:** 542690-80, 542690-81, 542690-83
- **Application of the substance / the mixture** Lubricating oil
- **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  
Contact in USA  
USA supplier:  
Distribution Centre Americas AMDC  
200 South Park Boulevard  
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- **Information department:**  
For additional questions regarding safety data sheets please contact your local Alfa Laval Sales Company which you find on [www.alfalaval.com](http://www.alfalaval.com) or in safety data sheet under section 16: Other Informaion
- **Emergency telephone number:**  
Call CHEMTREC  
+1 703-741-5970 / 1-800-424-9300 CCN 844

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified, according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:**

CAS: 128-37-0	2,6-di-tert-butyl-p-cresol	0.25-<1%
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### 4 First-aid measures

- **Description of first aid measures**
- **General information:** Wash contaminated clothing before reuse.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **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:**  
Wash the mouth with water.  
Do NOT induce vomiting.  
May cause aspiration when swallowing.  
Contact a doctor
- **Most important symptoms and effects, both acute and delayed**  
High pressure injection under skin: local necrosis.
- **Indication of any immediate medical attention and special treatment needed**  
Treat symptomatically.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Foam  
Fire-extinguishing powder  
Carbon dioxide  
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Not applicable.
- **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
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
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.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Particular danger of slipping on leaked/spilled product.  
Do not breathe vapour.
- **Environmental precautions:**  
Avoid release to the environment.  
Do not allow to enter sewers/ surface or ground water.

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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.

· **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.

· **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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

None of the ingredients is listed.

· **PAC-2:**

None of the ingredients is listed.

· **PAC-3:**

None of the ingredients is listed.

### 7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Avoid the formation of oil haze.

The usual precautionary measures for handling chemicals should be followed.

See Section 8 for information on personal protection equipment.

When using do not eat, drink or smoke.

· **Information about protection against explosions and fires:** No special measures required.

· **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 oxidizing agents.

Store away from reducing agents.

· **Further information about storage conditions:** Protect from humidity and water.

· **Specific end use(s)**

Lubricating oil

Professional use only.

### 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

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**· Control parameters****· Components with limit values that require monitoring at the workplace:****CAS: 128-37-0 2,6-di-tert-butyl-p-cresol**REL Long-term value: 10 mg/m<sup>3</sup>TLV Long-term value: 2\* mg/m<sup>3</sup>  
\*as inhalable fraction and vapor, A4**· Additional information:** The lists that were valid during the creation were used as basis.**· Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

Use only in well-ventilated areas.

Wash hands before breaks and at the end of work.

**· Breathing equipment:** Not necessary if room is well-ventilated.**· Protection of hands:**

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

Polymere 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 protection:** Wear eye/face protection.**· Body protection:** Working clothes**· Limitation and supervision of exposure into the environment**

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

## 9 Physical and chemical properties

**· Information on basic physical and chemical properties****· General Information****Appearance:**

Clear

**· Form:**

Liquid

**· Color:**

Colorless

**· Odor:**

Characteristic

**· Odor threshold:**

Not determined.

**· pH-value:**

Not determined.

**· Change in condition****Melting point/Melting range:**

Undetermined.

**Boiling point/Boiling range:**

Undetermined.

**· Flash point:**

250 °C (482 °F)

**· Flammability (solid, gaseous):**

Not applicable.

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· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	Not determined.
Upper:	Not determined.
· <b>Oxidizing properties</b>	Not applicable.
· <b>Vapor pressure:</b>	< 0.01 kPa
· <b>Density at 20 °C (68 °F):</b>	0.86 g/cm <sup>3</sup> (7.1767 lbs/gal) (DIN EN ISO 12185)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
Dynamic:	Not determined.
Kinematic at 40 °C (104 °F):	220 mm <sup>2</sup> /s
· <b>Solvent content:</b>	
VOC content:	0.00 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** The material is stable under recommended storage and handling conditions.
- **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.  
Formation of toxic gases is possible during heating or in case of fire.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** High temperature
- **Incompatible materials:** Reacts with acids, alkalis and oxidizing agents.
- **Hazardous decomposition products:**  
Poisonous gases/vapors  
No further information, refer to section 5.

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## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:

#### LD/LC50 values that are relevant for classification:

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

Oral LD50 &gt;2,930 mg/kg (Rat) (OECD 401)

Dermal LD50 &gt;5,000 mg/kg (Rat) (OECD 402)

#### Oleic acid derivative

Oral LD50 &gt;5,000 mg/kg (Rat)

Inhalative LC50 (4 h) 1.37 mg/L (Rat)

#### Primary irritant effect:

##### on the skin:

Prolonged and / or repeated skin contact may cause irritation.

No irritant effect.

##### on the eye:

Contact with eyes may result in mild irritation.

Irritating effect.

#### Sensitization: No sensitizing effects known.

#### Additional toxicological information:

#### Carcinogenic categories

#### IARC (International Agency for Research on Cancer)

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#### NTP (National Toxicology Program)

None of the ingredients is listed.

#### OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

#### Germ cell mutagenicity Based on available data, the classification criteria are not met.

## 12 Ecological information

### 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)

NOEC - No observed effect concentration &gt;0.39 mg/l (Daphnia)

#### 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)

#### Persistence and degradability

The product is not easily, but potentially biodegradable.

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

Biodegradability 30 % (OECD 302C)

**· Behavior in environmental systems:****· Bioaccumulative potential** Contains components with the potential to bioaccumulate.**· Mobility in soil** Low solubility, product floats on water. Absorbs to soil particles.**· 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.**· 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.

### 13 Disposal considerations

**· Waste treatment methods****· Recommendation:**

Must be specially treated adhering to official regulations.

Hand over to hazardous waste disposers.

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

**· Uncleaned packagings:****· Recommendation:**

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

### 14 Transport information

**· UN-Number****· DOT, ADR, ADN, IMDG, IATA** Void**· UN proper shipping name****· DOT, ADR, ADN, IMDG, IATA** Void**· Transport hazard class(es)****· DOT, ADR, ADN, IMDG, IATA****· Class** Void**· Packing group****· DOT, ADR, IMDG, IATA** Void**· Environmental hazards:****· Marine pollutant:** No**· Special precautions for user**

Not applicable.

**· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

**· UN "Model Regulation":**

Void

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## 15 Regulatory information

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

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

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

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ACTIVE

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

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

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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

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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)

· **Department issuing SDS:** Alfa Laval Sustainability Environment

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· **Date of preparation / last revision 07/31/2023**

· **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  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
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)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit

· **\* Data compared to the previous version altered.**

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