



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

Printing date 09.05.2018

Version number 11

Revision: 09.05.2018

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, 542690-83
- **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 Tumba AB
Hans Stahles väg 7
S-147 80 Tumba
Sweden
+46 8 530 650 00
info.se@alfalaval.com

Contact details for all countries are continually updated on our website.
Please visit www.alfalaval.com to access the information.
The latest version of Alfa Laval's SDS is available on our website.

- **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 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.

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

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	0.1-1%
CAS: 35074-77-2	hexamethylene bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl) propionate] ----- Aquatic Chronic 4, H413	0.1-1%
CAS: 110-25-8 EINECS: 203-749-3 Reg.nr.: 01-2119488991-20	oleoylsarcosine ----- Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H332; Skin Irrit. 2, H315	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:**

Immediately remove any clothing soiled by the product.
Wash contaminated clothing before reuse.

- **After inhalation:** Supply fresh air; consult doctor if symptoms persists.

· **After skin contact:**

Take off immediately all contaminated clothing.
Wash with water and soap.
If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, 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

No further relevant information available.

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

No further relevant information available.

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.

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- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
CO₂
Carbon monoxide (CO)
Aldehyde
Hydrocarbons
- **5.3 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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Do not breathe vapour.
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:**
Avoid release to the environment.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the material collected according to regulations.
- **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 good ventilation/exhaustion at the workplace.
Avoid the formation of oil haze.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
The usual precautionary measures are to be adhered to when handling chemicals.
See Section 8 for information on personal protection equipment.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **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.
- **Further information about storage conditions:** Protect from humidity and water.

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- **7.3 Specific end use(s)**
Lubricating oil
Professional use only.

SECTION 8: Exposure controls/personal protection

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

- **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/m³

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

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Use only in well-ventilated areas.

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

- **Respiratory protection:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

- **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**

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.

Nitrile rubber, NBR

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Wear eye/face protection.

- **Body protection:** Working clothes

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Clear

- **Form:**

Liquid

- **Colour:**

Colourless

- **Odour:**

Weak, characteristic

- **Odour threshold:**

Not determined.

- **pH-value:**

Not determined.

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· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
· Flash point:	250 °C
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	< 0.01 kPa
· Density at 20 °C:	0,857 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Insoluble.
· Partition coefficient: n-octanol/water:	>3
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	25 mm ² /s
· Solvent content:	
Organic solvents:	0,0 %
· 9.2 Other information	No further relevant information available.

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:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
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**
Keep away from sources of ignition - No smoking.
High temperature
- **10.5 Incompatible materials:** Store away from oxidising agents.
- **10.6 Hazardous decomposition products:**
Danger of forming toxic pyrolysis products.

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No further information, refer to section 5.

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SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity

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

Oral	LD50	890 mg/kg (rat)
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Based on available data, the classification criteria are not met.

· Primary irritant effect:

· Skin corrosion/irritation

Prolonged and / or repeated skin contact may cause irritation

Prolonged and / or repeated skin contact combined with poor personal hygiene may cause inflammation of the skin in the form of dermatitis, eczema and oil acne.

Product in use under high pressure that has been forced under the skin, is a serious situation that requires IMMEDIATE hospital treatment.

· Serious eye damage/irritation Contact with eyes may result in mild irritation.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

· Acute effects (acute toxicity, irritation and corrosivity)

Low acute toxicity, but aspiration following ingestion and vomiting may cause severe and potentially fatal chemical pneumonia.

· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

· 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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

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

LC50	5 mg/L (Fish) Oryzias latipes, 48h
EC50	0.42 mg/L (Algae) Desmodesmus subspicatus, 72h 6 mg/L (Microalgae) Pseudokirchneriella subcapitata, 72h

· 12.2 Persistence and degradability The product is not easily, but potentially biodegradable.

· 12.3 Bioaccumulative potential Contain components with the potential to bioaccumulate.

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

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **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 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 not be disposed together with household garbage. Do not allow product to reach sewage system.
Must be specially treated adhering to official regulations.
Hand over to hazardous waste disposers.

- **European waste catalogue**

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:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- | | |
|---|-----------------|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class | Void |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: | No |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · UN "Model Regulation": | Void |

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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)

EU regulation (EC) no 1272/2008 (CLP)

EC DIRECTIVE 2008/98/EC (waste)

TSCA (Toxic Substance Control Act) - All chemical components in this material are included in, or are exceptions from the TSCA listing.

KECL - FULFILS

AICS - FULFILS

DSL/NDL - FULFILS

PICCS - FULFILS

ENCS - FULFILS

IECSC - FULFULS

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

H413 May cause long lasting harmful effects to aquatic life.

• Department issuing SDS: Alfa Laval Corporate Standards & Regulatory Operations

• Contact:

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

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Poland: poland.info@alfalaval.com
Portugal: portugal.info@alfalaval.com
Qatar: alme.marketing@alfalaval.com
Romania: romania.info@alfalaval.com
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Singapore: al.singapore@alfalaval.com
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South Africa: info.sa@alfalaval.com
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Sweden: info.se@alfalaval.com
Switzerland: info.mideurope@alfalaval.com
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Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

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ELINCS: European List of Notified Chemical Substances

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

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

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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

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