



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.06.2017

Version number 1

Revision: 16.09.2015

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

#### 1.1 Product identifier

Trade name: Tornado

Article number: 05.30.10

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

Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC24 Lubricants, greases, release products

Process category PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 Use of functional fluids in small devices

#### Environmental release category

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC7 Use of functional fluid at industrial site

ERC9a Widespread use of functional fluid (indoor)

ERC9b Widespread use of functional fluid (outdoor)

#### Application of the substance / the mixture

Engine oil

#### 1.3 Details of the supplier of the safety data sheet

##### Manufacturer/Supplier:

Kroon Oil BV  
Dollegoorweg 15  
NL-7602 EC ALMELO  
Tel.: +0031-(0)546-818165

##### Further information obtainable from:

Product safety department - vib@kroon-oil.nl

##### 1.4 Emergency telephone number:

+31 (0)546 818165 (9 AM to 4 PM, Monday to Friday)

NL - National Poison Information Centre (NVIC):

Tel.nr.: +31 30 - 2748888 - Only for the purpose of informing medical personnel in case of acute intoxications.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to

Regulation (EC) No 1272/2008 The product is not classified according to the CLP regulation.

#### 2.2 Label elements

##### Labelling according to

Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Additional information: EUH208 Contains calcium branched chain alkyl phenate sulphide, Mannich. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

#### 2.3 Other hazards

##### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Dangerous components:

EC number: 926-141-6 Reg.nr.: 01-2119456620-43 01-2119484819-18	Distillates (petroleum), hydrotreated light ----- ☠ Asp. Tox. 1, H304	10 - <25%
CAS: 84605-20-9 EC number: 617-593-2	Amines, polyethylenepolyreaction products with succinic anhydride polyisobutenyl derivs ----- Aquatic Chronic 4, H413	1 - <2.5%

- **Additional information:** The highly refined mineral oil contains <3% (w/w) DMSO extract, according to IP346.  
 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:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.

### 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

If swallowed or in case of vomiting, danger of entering the lungs.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- **Suitable extinguishing agents:** CO<sub>2</sub>, dry chemical, or foam. Water can be used to cool and protect exposed material.

### 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.

### 5.3 Advice for firefighters

#### Protective equipment:

Wear self-contained respiratory protective device.  
 Wear fully protective suit.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

- **6.2 Environmental precautions:** 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).  
 Remove from the water surface (e.g. skim or suck off).

### 6.4 Reference to other sections

No dangerous substances are released.  
 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

No special measures required.  
 Avoid the formation of oil haze.

### Information about fire - and explosion protection:

Protect against electrostatic charges.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage:

#### Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

## 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:** Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter. The lists valid during the making were used as basis.
- **Additional information:**
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Wear gloves for the protection against chemicals according to EN 374.

Oil resistant gloves
- **Material of gloves**

Nitrile rubber, NBR  
PVC gloves  
Neoprene gloves  
Recommended thickness of the material:  $\geq 0.35$  mm  
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.
- **Penetration time of glove material**

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.  
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

<ul style="list-style-type: none"> <li>· <b>9.1 Information on basic physical and chemical properties</b></li> <li>· <b>General Information</b></li> <li>· <b>Appearance:</b> <ul style="list-style-type: none"> <li><b>Form:</b> Liquid</li> <li><b>Colour:</b> Brown</li> </ul> </li> <li>· <b>Odour:</b> Characteristic</li> </ul>	
<ul style="list-style-type: none"> <li>· <b>Change in condition</b> <ul style="list-style-type: none"> <li><b>Initial boiling point and boiling range:</b> Undetermined.</li> </ul> </li> <li>· <b>Drip point:</b> <ul style="list-style-type: none"> <li><b>Pour point</b> -45 °C (ASTM D97)</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>· <b>Flash point:</b> 78 °C</li> <li>· <b>Flammability (solid, gas):</b> Not applicable.</li> <li>· <b>Ignition temperature:</b> 210 °C</li> </ul>	

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· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
Lower:	0.5 Vol %
Upper:	5.5 Vol %
· <b>Vapour pressure at 20 °C:</b>	0.2 hPa
· <b>Density at 20 °C:</b>	0.875 g/cm <sup>3</sup>
· <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>	
40 °C	70.5 mm <sup>2</sup> /s (ASTM D445)
· <b>Solvent content:</b>	
Organic solvents:	0.0 %
· <b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

### · LD/LC50 values relevant for classification:

#### Distillates (petroleum), hydrotreated light

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/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.
- **Sensitisation** For respiratory and skin sensitisation: Not expected to be a sensitiser.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. The IP 346 test demonstrates that all of the oils in this product contain less than 3% extractables.
- **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:

#### Distillates (petroleum), hydrotreated light

LC50 (96 h)	>45 mg/l (fish)
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- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.

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- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.
- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## 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.

<b>· European waste catalogue</b>	
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

<b>· 14.1 UN-Number</b>	
<b>· ADR/ADN, ADN, IMDG, IATA</b>	Void
<b>· 14.2 UN proper shipping name</b>	
<b>· ADR/ADN, ADN, IMDG, IATA</b>	Void
<b>· 14.3 Transport hazard class(es)</b>	
<b>· ADR/ADN, ADN, IMDG, IATA</b>	
<b>· Class</b>	Void
<b>· 14.4 Packing group</b>	
<b>· ADR/ADN, IMDG, IATA</b>	Void
<b>· 14.5 Environmental hazards:</b>	
<b>· Marine pollutant:</b>	No
<b>· 14.6 Special precautions for user</b>	Not applicable.
<b>· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
<b>· UN "Model Regulation":</b>	Void

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances**
- **- ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **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.

- **Relevant phrases** H304 May be fatal if swallowed and enters airways.  
H413 May cause long lasting harmful effects to aquatic life.
- **Department issuing SDS:** Product safety department.
- **Contact:** Product safety department

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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  
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  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

**· Sources**

\* Data compared to the previous version altered.