

**1.) Identification of the substance/preparation and of the company/undertaking****Identification of the substance or preparation****Trade name****LUKOIL NAVIGO 6 SO****Use of the substance/preparation**

Engine Lubrication

**Company/undertaking identification****Address**OOO LLK-INTERNATIONAL  
6, Malaya Yakimanka  
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**Information provided by / telephone**

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+49 (0)551 19240 (Giftinformationszentrum Nord)

**Advice on Safety Data Sheet**

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**Supplier****Address**LUKOIL Marine Lubricants Ltd.  
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2112 Aglantzia, Nikosia  
Cyprus

Telephone no. +49 (0)40 / 180 422 020

**2.) Hazards identification****Hazard symbols**

- N O N E

**R phrases**

- N O N E

**Particular information pertaining specific risk for human / environment**

The product does not require a hazard warning label in accordance with Directive 1999/45/EC. No special hazards have to be mentioned. But please observe the information given in this safety data sheet.

**3.) Composition / information on ingredients****Chemical characterization**

Mixture (preparation)

**Hazardous ingredients**

**Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts**

EC no.	272-028-3	Index no.	-	CAS no.	68649-42-3
Concentration	> 0,5	<	1	%-b.w.	
Classification	Xi; R41	N;	R51/53		
Hazard symbols	N, Xi	R phrases		41-51/53	

**4.) First aid measures**

**General information**

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

**After inhalation**

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Irregular breathing/no breathing: artificial respiration.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.).

**After ingestion**

Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

**5.) Fire-fighting measures**

**Suitable extinguishing media**

Foam; extinguishing powder; Water spray jet; Carbon dioxide

**Extinguishing media that must not be used for safety reasons**

Full water jet

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

In the event of fire, the following can be released:

- Carbon dioxide (CO<sub>2</sub>)
- Carbon monoxide (CO)

**Special protective equipment for fire-fighters**

Use self-contained breathing apparatus. Wear protective clothing.

**Other information**

Cool endangered containers with water spray jet.

**6.) Accidental release measures**

**Personal precautions**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

**Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**Methods for cleaning up/taking up**

Prevent spread over a wide area (by containment with sand or earth). Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

## 7.) Handling and storage

### Handling

#### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far it is possible by the state of the art.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

### Storage

#### Requirements for storage rooms and vessels

Store product in closed containers. Storage rooms must be properly ventilated. Emptied containers may contain product residues and therefore must be handled with care.

Reuse only after appropriate cleaning.

#### Advice on storage assembly

Do not store together with:

Oxidizing agents

Acids

#### Further information on storage conditions

Keep container tightly closed in a well-ventilated place. Protect from heat and direct sunlight.

## 8.) Exposure controls / personal protection

### Exposure limit values

N O N E

### Personal protective equipment

#### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

#### Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material

nitrile

Appropriate Material

neoprene

#### Eye protection

Safety glasses with side protection shield (EN 166)

#### Skin protection

Clothing as usual in the chemical industry. rubber boots

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin. Do not inhale vapours.

**9.) Physical and chemical properties****General information**

Form	liquid
Colour	brownish yellow

**Important health, safety and environmental information****Changes in physical state**

Value	no data available
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**Flash point**

Value	230	°C
Method	ASTM D 92	

**Density**

Value	890	- 900	kg/m <sup>3</sup>
Method	EN ISO 12185		
Reference temperature	20	°C	

**Viscosity**

Type	kinematic		
Value		11,5	cSt
Method	ASTM D 445		
Reference temperature	100	°C	

**Solubility in water**

Remarks	insoluble
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**Octanol/water partition coefficient (log Pow)**

Value	>	3
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**10.) Stability and reactivity****Conditions to avoid**

Heat

**Materials to avoid**

Oxidizing agents; Acids

**Hazardous decomposition products**

No hazardous decomposition products known.

**Thermal decomposition**

Remarks	No decomposition if used as prescribed.
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**11.) Toxicological information****Experience in practice**

Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin.

Eye contact with the product may cause slight irritation.

Inhalation of vapours from the heated product can cause irritation of the respiratory tract and the eyes.

**Other information (chapter 11.)**

Product specific toxicological data are not known.

**12.) Ecological information****Other adverse effects**

Ecological data are not available.

Do not discharge product unmonitored into the environment.

**13.) Disposal considerations****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

**14.) Transport information****Other information (chapter 14.)**

The product is not defined under national/international road, rail, sea and air transport regulations as a hazardous material.

**15.) Regulatory information****Labelling in accordance with EC directives**

The product does not require a hazard warning label in accordance with EC Directive 1999/45/EC.

**Hazard symbols**

- N O N E

**R phrases**

- N O N E

**S phrases**

- N O N E

**Special labelling for certain preparations**

"Safety data sheet available for professional user on request."

**Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances**

Remarks Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

**National regulations****National chemical inventories**

TSCA (USA) listed

**16.) Other information****Sources of key data used to compile the data sheet:**

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC as amended in each case.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

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Trade name: LUKOIL NAVIGO 6 SO

Status: 23.02.2010

Version: 1.0.0 / GB

Date of printing: 23.02.2010

### Relevant R-phrases (chapter 3):

- |       |   |
|-------|---|
| 41    | Risk of serious damage to eyes.   |
| 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

### Department issuing safety data sheet

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