

# Technical Datasheet

## Elaskon III Star LM

Elaskon III Star LM is used for maintenance lubrication of driving-sheave ropes in mining, for use on ship and off-shore ropes. Elaskon II Star is best suited for Koepe-Hoisting.

### Properties:

Elaskon III Star LM forms a gripproof, green-transparent layer that represents the solid base lubricant Elaskon II Star and which has a very good adhesion. The product penetrates into the rope. Elaskon III Star LM protects the rope against corrosion and wear. The high friction coefficient of the ready layer prevents slipping of the rope on driving-sheaves.

### Application:

Elaskon III Star LM is supplied in liquid form and applicable by spraying, brushing, rolling or that like. In closed pits only brushes and wipers must be used. After checking from the authorities also spraying with thin beam exluding aerosoles may be applied. The product is based on the wire rope lubricant Elaskon II Star and contains a solvent. The layer is ready after evaporation of the solvent, depending on climate conditions after 2-8 hours. The optimal application temperature is 20°C. The rope s hould be cleaned before using Elaskon III Star LM.

Bw-Code: CY6075; Vers-Nr.: 8030-12-351-8448  
BW-Auftragnehmer-Nr.: 3433Y

Certified and validated by Hygieneinstitut Gelsenkirchen (Nr. A2386D/00/C of 28/06/00) and by Landesoberbergamt Nordrhein-Westfalen (Office for Mining of the Federal State of Nordrhein-Westfalen) after Mining Ordinance for use in closed pits (reference-nr. 12.22.63-2000-5 of 21/07/00).



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**certified friction coefficient**

**green colour**

**high corrosion protection also in seawater**

**high adhesion**

**inlay materials of driving sheeves are not affected**

### Packaging:

200 l drum  
30 l hobbock  
10 l can  
600 ml spray can



# Technical Data

state: 01/04/2010

## Elaskon III Star LM

Density (15°C)	DIN 51757	0,9	g/cm <sup>3</sup>
Flashpoint	DIN EN 22719	ca. 70	°C
Viscosity (40°C)	DIN 51562, Teil 1	ca. 30	mm <sup>2</sup> /s
Dropping point (Ubbelohde), (without solvent)	DIN 51801, Teil 2	> 90	°C
Breaking point (75 g/m <sup>2</sup> ), (without solvent)	DIN EN 12593	< -40	°C
Condensated water climate, containing SO <sub>2</sub> (Kesternich)	DIN 50018 KFW 0,2S	10 cycles	
Salt spray (fog) test	DIN 50021, SS	200 h	
friction coefficient (20°C, different inlay materials)	DIN 21258, 4.1	0,35 - 0,40	
friction coefficient (30°C, different inlay materials)	DIN 21258, 4.2	0,24 - 0,31	

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Elaskon III Star LM

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

### 1.1. Product identifier

Elaskon III Star LM

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

#### Use of the substance/mixture

lubricant, corrosion protection agent

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

Company name:	Elaskon Sachsen GmbH & Co KG für Spezialschmierstoffe	
Street:	Lohrmannstr. 10	
Place:	D-01237 Dresden	
Telephone:	+49/351/28575-0	Telefax: +49/351/28575-99
e-mail:	info@elaskon.de	
Contact person:	Dr. Pusch	
Internet:	www.elaskon.de	
Responsible Department:	Laboratory	

1.4. Emergency telephone number: +49/351/28575-0 (during office hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Directive 67/548/EEC or 1999/45/EC

R phrases:  
Repeated exposure may cause skin dryness or cracking.

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

### 2.2. Label elements

#### Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

highly viscous components from crude oil processing and additives solved in an aromate free hydrocarbon solvent

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**Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
918-481-9	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	50%
	Xn - Harmful R65-66	
	Asp. Tox. 1; H304 EUH066	
01-2119457273-39		

Full text of R-, H- and EUH-phrases: see section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

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

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**

Non-flammable. Vapours can form explosive mixtures with air. In case of fire and/or explosion do not breathe fumes.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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#### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Use only in well-ventilated areas. Keep away from sources of ignition. - No smoking.

#### **Advice on protection against fire and explosion**

Take precautionary measures against static discharge.

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

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep container tightly closed and in a well-ventilated place.

#### **Advice on storage compatibility**

No special measures are necessary.

#### **Further information on storage conditions**

Protect against: heat.

### **7.3. Specific end use(s)**

lubricant, corrosion protection agent

## SECTION 8: Exposure controls/personal protection

### **8.1. Control parameters**

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### **Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

#### **Eye/face protection**

Wear eye/face protection.

#### **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Suitable material: NBR (Nitrile rubber), FKM (fluororubber), penetration time (maximum wearing period): 480 min. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### **Skin protection**

Wear suitable protective clothing.

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#### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: aerosol or mist generation. Suitable respiratory protective equipment: Combination filtering device (EN 14387) AX-P2

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: liquid  
Colour: green brown  
Odour: like: Petroleum:

#### Test method

pH-Value: not determined

#### Changes in the physical state

Melting point: not determined

Initial boiling point and boiling range: not determined

Flash point: 70 °C DIN EN ISO 2719

#### Flammability

Solid: not applicable

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

Ignition temperature: ca. 240 °C DIN 51794

#### Auto-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

#### Oxidizing properties

Not oxidizing.

Vapour pressure: not determined

Density (at 15 °C): 0,9 g/cm<sup>3</sup> DIN 51757

Water solubility: insoluble

#### Solubility in other solvents

Petroleum:

Partition coefficient: not determined

Viscosity / kinematic:  
(at 40 °C) ca. 40 mm<sup>2</sup>/s DIN 51562

Vapour density: not determined

Evaporation rate: not determined

### 9.2. Other information

Solid content: not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

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#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

No known hazardous reactions.

#### **10.4. Conditions to avoid**

none

#### **10.5. Incompatible materials**

No information available.

#### **10.6. Hazardous decomposition products**

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Toxicokinetics, metabolism and distribution**

No data available

##### **Acute toxicity**

Acute toxicity, oral LD50: > 5000 mg/kg (Rat), Acute toxicity, dermal LD50: >3000 mg/kg (Rabbit)

##### **Irritation and corrosivity**

Irritant effect on the eye: mild irritant.

Irritant effect on the skin: Has degreasing effect on the skin. Frequently or prolonged contact with skin may cause dermal irritation.

##### **Sensitising effects**

no danger of sensitization.

##### **Additional information on tests**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

### SECTION 12: Ecological information

#### **12.1. Toxicity**

The product is not: Ecotoxic.

#### **12.2. Persistence and degradability**

Biological degradation: Product is biodegradable with difficulty.

#### **12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

#### **12.4. Mobility in soil**

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants.

#### **12.5. Results of PBT and vPvB assessment**

The product has not been tested.

#### **12.6. Other adverse effects**

No information available.

#### **Further information**

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

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#### Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Dispose of waste according to applicable legislation.

#### Waste disposal number of waste from residues/unused products

130208 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); waste engine, gear and lubricating oils; other engine, gear and lubricating oils  
Classified as hazardous waste.

#### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Dispose of waste according to applicable legislation. Hand over to officially registered waste disposal company.

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Air transport (ICAO)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

No information available.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulatory information

2004/42/EC (VOC): 50 % (450 g/l)

#### Additional information



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To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

#### National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 14.

#### 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Relevant R-phrases (Number and full text)

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

#### Relevant H- and EUH-phrases (Number and full text)

H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*