

## SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : SYNTHESO LM 220

Article-No. : 012074

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

Use of the Substance/Mixture : Grease

Recommended restrictions on use : Restricted to professional users.

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

KLÜBER LUBRICATION MÜNCHEN  
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Deutschland  
Phone: +49 (0) 897876-0  
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com  
Responsible/issuing person : Material Compliance Management

National contact : Klüber Lubrication Great Britain Limited  
Unit 10 Pennine Business Park  
Longbow Close  
Huddersfield  
West Yorkshire HD2 1GQ  
Great Britain  
Tel: +44-1422-205115  
Fax: +44-1422-206073  
sales@uk.klueber.com

#### 1.4 Emergency telephone number

+49 89 7876 700 (24 hrs)

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### 2. Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**Classification (67/548/EEC, 1999/45/EC)**

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Not a hazardous substance or mixture.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

### 2.3 Other hazards

Avoid induction of air, low cross-section of pipes, high pressures and fast pressure increase. Degas system carefully before putting into operation. The product belongs to the category silicone greases with PTFE. This product category may form explosive decomposition reactions in conveying devices with high increase in pressure and low cross-section of pipes.

## 3. Composition/information on ingredients

### 3.2 Mixtures

Chemical nature	: silicone oil PTFE
Remarks	: No hazardous ingredients

## 4. First aid measures

### 4.1 Description of first aid measures

If inhaled	: Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If unconscious place in recovery position and seek medical advice. Keep respiratory tract clear. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact	: Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and persists. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.
If swallowed	: Move the victim to fresh air. If unconscious place in recovery position and seek medical advice. Keep respiratory tract clear. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

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- Symptoms : No information available.
- Risks : None known.

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

- Treatment : No information available.

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## 5. Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet  
: High volume water jet

### 5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Fire may cause evolution of:  
Carbon oxides  
Halogenated compounds  
Metal oxides  
Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. In the case of respirable dust and/or fumes, use self-contained breathing apparatus. Exposure to decomposition products may be a hazard to health.
- Further information : Standard procedure for chemical fires.

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## 6. Accidental release measures

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

- Personal precautions : Evacuate personnel to safe areas. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.

### 6.2 Environmental precautions

- Environmental precautions : Try to prevent the material from entering drains or water courses.

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Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean up promptly by sweeping or vacuum.  
Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8.

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## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Wash hands and face before breaks and immediately after handling the product.  
Do not get in eyes or mouth or on skin.  
Do not get on skin or clothing.  
Do not ingest.  
Do not repack.  
These safety instructions also apply to empty packaging which may still contain product residues.  
Keep container closed when not in use.

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

Requirements for storage areas and containers : Store in original container.  
Keep container closed when not in use.  
Keep in a dry, cool and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Store in accordance with the particular national regulations.  
Keep in properly labelled containers.

### 7.3 Specific end use(s)

: Consult the technical guidelines for the use of this substance/mixture.

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## 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

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### 8.2 Exposure controls

#### Engineering measures

Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

- Respiratory protection : Not required; except in case of aerosol formation.  
Filter type P
- Hand protection : For prolonged or repeated contact use protective gloves.  
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.  
In case of contact through splashing:  
  
: Nitrile rubber  
Protective index Class 1
- Eye protection : Tightly fitting safety goggles  
Safety glasses with side-shields conforming to EN166
- Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.
- Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

#### Environmental exposure controls

- General advice : Try to prevent the material from entering drains or water courses.  
Local authorities should be advised if significant spillages cannot be contained.

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Form : paste
- Colour : white
- Odour : characteristic
- Odour Threshold : No data available

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pH	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: Combustible Solids
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: < 0.001 hPa, 20 °C
Relative vapour density	: No data available
Density	: 1.27 g/cm <sup>3</sup> , 20 °C
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Ignition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available

### 9.2 Other information

Sublimation point	: No data available
Bulk density	: No data available

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## 10. Stability and reactivity

### 10.1 Reactivity

None reasonably foreseeable.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

### 10.4 Conditions to avoid

Conditions to avoid : No conditions to be specially mentioned.

### 10.5 Incompatible materials

Materials to avoid : No materials to be especially mentioned.

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### 10.6 Hazardous decomposition products

Hazardous decomposition products : > 150°C small quantities of formaldehyde may be formed.  
> 180°C small quantities of benzene may be formed.  
> 280°C danger of forming toxic pyrolysis products.

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Product

Acute oral toxicity : This information is not available.  
Acute inhalation toxicity : This information is not available.  
Acute dermal toxicity : This information is not available.  
Skin corrosion/irritation : This information is not available.  
Serious eye damage/eye irritation : This information is not available.  
Respiratory or skin sensitisation : This information is not available.  
Germ cell mutagenicity :  
Genotoxicity in vitro : No data available  
Genotoxicity in vivo : No data available  
Carcinogenicity : No data available  
Reproductive toxicity : No data available  
Teratogenicity : No data available  
Repeated dose toxicity : This information is not available.  
Aspiration toxicity : This information is not available.  
  
Further information : Information given is based on data on the components and the toxicology of similar products.

## 12. Ecological information

### 12.1 Toxicity

#### Product:

Toxicity to fish :  
No data available  
Toxicity to daphnia and other aquatic invertebrates :  
No data available  
Toxicity to algae :  
No data available  
Toxicity to bacteria :

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No data available

### 12.2 Persistence and degradability

**Product:**

Biodegradability : No data available  
Physico-chemical : No data available  
removability

### 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT)., This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

### 12.4 Mobility in soil

**Product:**

Mobility : No data available  
Distribution among : No data available  
environmental compartments

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

**Product:**

Additional ecological : No information on ecology is available.  
information

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## 13. Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
: Waste codes should be assigned by the user based on the application for which the product was used.  
Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.



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### 14. Transport information

#### 14.1 UN number

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.2 Proper shipping name

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.3 Transport hazard class

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.4 Packing group

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.5 Environmental hazards

**ADR**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

#### 14.6 Special precautions for user

No data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

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### 15. Regulatory information

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

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### **mixture**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Major Accident Hazard Legislation : 96/82/EC Update: Not applicable

### **15.2 Chemical Safety Assessment**

This information is not available.

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## **16. Other information**

### **Further information**

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