

SYNTHE SO 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

Product information

Product name : SYNTHESO LM 220

Article-No. : 012074

Use of the Substance/Mixture : Grease

Company : KLÜBER LUBRICATION MÜNCHEN
Geisenhausenerstrasse 7
D-81379 München
Deutschland
Phone: +49 (0) 897876-0
Fax: +49 (0) 897876-333

E-mail address : mcm@klueber.com
Material Compliance Management

National contact : Klüber Lubrication Australia Pty. Ltd.
1st Floor, 3 Brand Drive
P.O. Box 4
Thomastown Victoria 3074 (Melbourne)
Australia
+61-3-9464-7577
Fax: +61-3-9464-7588
kluber.mel@au.klueber.com

Emergency telephone number : (03) 9464 7577 (9am-5pm AEST, Mon-Fri)
0011 49 89 7876 700 (24hrs)

2. HAZARDS IDENTIFICATION

Standard for the Uniform Scheduling of Medicines and Poisons : No poison schedule number allocated

General advice : 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.

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : silicone oil
PTFE

Hazardous components

No hazardous ingredients

4. 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.

Notes to physician

Symptoms : No information available.

Risks : None known.

Treatment : No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

Unsuitable extinguishing media	: High volume water jet : High volume water jet
Specific hazards during firefighting	: Fire may cause evolution of: Carbon oxides Halogenated compounds Metal oxides Nitrogen oxides (NO _x)
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.

6. ACCIDENTAL RELEASE MEASURES

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.
Environmental precautions	: Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

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
-------------------------	---

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

may still contain product residues.
Keep container closed when not in use.

Storage

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.

Materials to avoid : No materials to be especially mentioned.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

the specific work-place.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	: paste
Colour	: white
Odour	: characteristic

Safety data

Flash point	: Note: Not applicable
Ignition temperature	: Remarks: No data available
Lower explosion limit	: Note: No data available
Upper explosion limit	: Note: No data available
Flammability (solid, gas)	: Combustible Solids
Oxidizing properties	: Note: No data available
Auto-ignition temperature	: Note: No data available
pH	: Note: No data available
Melting point/range	: Note: No data available
Boiling point/boiling range	: Note: No data available
Sublimation point	: Note: No data available
Vapour pressure	: < 0,001 hPa at 20 °C
Density	: 1,27 g/cm ³ at 20 °C
Bulk density	: Note: No data available
Water solubility	: Note: insoluble
Partition coefficient: n- octanol/water	: Note: No data available
Solubility in other solvents	: Note: No data available
Viscosity, dynamic	: Note: No data available

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

Viscosity, kinematic : Note: No data available
Relative vapour density : Note: No data available
Evaporation rate : Note: No data available

10. STABILITY AND REACTIVITY

Conditions to avoid : Remarks: No conditions to be specially mentioned.
Materials to avoid : Remarks: No materials to be especially mentioned.
Hazardous decomposition products : Note: > 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.
Hazardous reactions : No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : Remarks: This information is not available.
Acute inhalation toxicity : Remarks: This information is not available.
Acute dermal toxicity : Remarks: This information is not available.
Skin irritation : Remarks: This information is not available.
Eye irritation : Remarks: This information is not available.
Sensitisation : Remarks: This information is not 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.

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

12. Ecological information

Ecotoxicity effects

Toxicity to fish :
Remarks:
No data available

Toxicity to daphnia and other : Remarks:
aquatic invertebrates No data available

Toxicity to algae : Remarks:
No data available

Toxicity to bacteria : Remarks:
No data available

Elimination information (persistence and degradability)

Bioaccumulation : Remarks:
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).

Mobility : Remarks:
No data available

Distribution among : Remarks:
environmental compartments No data available

Biodegradability : Remarks:
No data available

Physico-chemical : Remarks:
removability No data available

Further information on ecology

Additional ecological : No information on ecology is available.
information

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

13. DISPOSAL CONSIDERATIONS

- Product : The product should not be allowed to enter drains, water courses or the soil.
- Contaminated packaging : Empty containers can be landfilled, when in accordance with the local regulations.

14. TRANSPORT INFORMATION

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

15. REGULATORY INFORMATION

National regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons : No poison schedule number allocated

16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This safety datasheet applies only to products originally packaged and labelled by KLÜBER LUBRICATION. The information contained therein is protected by copyright and must not be reproduced or amended without the express written approval of KLÜBER LUBRICATION. This document

SYNTHESO LM 220

Version 1.4

Revision Date 30.11.2015

Print Date 30.11.2015

may be passed on only to the extent required by law. Any dissemination of our safety datasheets (e.g. as a document for download from the Internet) beyond this legally required extent is not permitted without express written consent. KLÜBER LUBRICATION provides its customers with amended safety datasheets as prescribed by law. The customer is responsible for passing on safety datasheets and any amendments contained therein to its own customers, employees and other users of the product. KLÜBER LUBRICATION provides no guarantee that safety datasheets received by users from third parties are up-to-date. All information and instructions in this safety datasheets were compiled to the best of our knowledge and are based on the information available to us. The data provided are intended to describe the product in relation to the required safety measures; they are neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and do not justify any contractual legal relationships.

End of Safety Data Sheet