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

1.1 Product identifier:
**MOL Favorit 2 Blue lithium complex lubricating grease**

1.2 Relevant identified uses of the mixture or substance and uses advised against
Relevant identified uses: lithium complex lubricating grease
Uses advised against: no data

1.3 Details of the supplier of the safety data sheet:
MOL-LUB Lubricant Production Trade and Service Limited Liability Company
H-2931 Almásfüzitő, Fő út 21., Hungary
Phone / Fax: +36 34 526 330 / +36 34 526 391
E-mail: kenoanyag@mol.hu

Request SDS of:
MOL-LUB Lubricant Production Trade and Service Limited Liability Company
Customer Service Center
H-2931 Almásfüzitő, Fő út 21., Hungary
Phone / Fax: +36 80 201 296 / +36 34 348 010

Responsible for SDS:
MOL-LUB Ltd. Csaba Horváth, head of SD, HSE & Business Support
Phone: +36 34 526 343; Mobile: +36 20 474 2644
e-mail: csahorvath@mol.hu

1.4 Emergency telephone number
Emergency telephone (on workdays: 07-15$^{20}$ h (CET)): +36 34 526 210
Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)
Tel.: 36 80 201 199 (0-24 h, free number).
National Health Toxicological Information Service:

## Section 2 Hazards identification

2.1 Classification of the mixture or substance

| Hazard Class and Category: | Hazard statement: | |
|---|---|---|
| Eye Irrit. 2 | H319 | Causes serious eye irritation. |

2.2 Label elements

Product identification:
Trade name: **MOL Favorit 2 Blue lithium complex lubricating grease**
Hazardous component(s): -

Pictogram:

Signal word: **Warning**

Hazard statement:
**H319** Causes serious eye irritation.

Supplemental hazard information: -

Precautionary statements – General: -

Precautionary statements – Prevention:
**P273** Avoid release to the environment.
**P280** Wear eye/face protection.

Precautionary statements – Response:
**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
**P337 + P313** If eye irritation persists: Get medical advice/attention.

Precautionary statements – Storage: -

Precautionary statements – Disposal:
**P501** Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:
Tactile warning of danger: Not required.
Transport classification: see section 14.

2.3 Other hazards
The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

## Section 3 Composition/information on ingredients

3.2 Mixtures
Chemical description: Mineral oil based consistent lubricant containing lithium soap and additives.

Component / Hazardous component(s):

| Name | EU number | CAS number | Hazard classes and cat. | Hazard statements | Conc. %(m/m) |
|---|---|---|---|---|---|
| Lubricating oils (petroleum), C>25* REACH Registration Nr.: 01-2119486948-13 | 309-874-0 | 101316-69-2 | -<br>(Note L) | - | max. 70 |
| Lubricating oils (petroleum), C24- C50* REACH Registration Nr.: 01-2119489969-06 | 309-877-7 | 101316-72-7 | Asp.Tox.1<br>(Note L) | H304 | max. 15 |
| Polyizobutenyl succinic acid anhydride | - | 67762-77-0 | Eye Irrit.2<br>STOT SE 3 | H319<br>H335 | max. 5,7 |
| Fatty acids, vegetable-oil, sulfurized | 304-821-2 | 94279-76-2 | Skin Irrit. 2<br>Eye Irrit. 2 | H315<br>H319 | max. 1,5 |
| Zinc alkyl dithiophosphate | 272-028-3 | 68649-42-3 | Skin Irrit. 2<br>Eye Dam. 1<br>Aquatic Chronic 2 | H315<br>H318<br>H411 | max. 1.5 |
| Lithium hydroxide monohydrate | 215-183-4 | 1310-66-3 | Skin Corr. 1B<br>Acute Tox. 4 | H314<br>H302 | max. 0.1 |

*: with exposure limit

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

## Section 4 First aid measures

4.1 Description of first aid measures
General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation: Remove the affected person to fresh air. Seek medical attention.

Skin contact: Remove contaminated clothing. Wash with plenty amount of water, using soap. In case of persistent irritation, get medical advice.

Eye contact: Flush eyes with large amounts of water for at least 15 minutes. Get medical attention.

Ingestion: If swallowed, give drink salted lukewarm water. Induce vomiting. Get medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed
Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment need
Not required.

## Section 5 Fire-fighting measures

Fire hazards:
Combustible

5.1 Extinguishing media
Suitable extinguishing media:
Foam, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:
Water jet.

5.2 Special hazards arising from the mixture or substance
Hazardous combustion products:
On burning, carbon monoxide, carbon dioxide, sulphur oxides, phosphor oxides, nitrogen oxides, zinc oxide, lithium oxide, various hydrocarbons and soot can be formed.

5.3 Advice for fire-fighters
Special protective equipment:
According to the existing fire-fighting regulations.

Further information:
Collect contaminated firefighting water separately. It must not enter the sewage system. Contaminated extinguishing water must be disposed of in accordance with official regulations.

## Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions: see Section 8.
Danger of slipping on leaked out/spilled product.

6.2 Environmental precautions:
Confine spills to prevent material from entering sewers, watercourses, drains and into soil
Notify relevant authority.

6.3 Methods and material for containment and cleaning up
On soil: Take up spilled product with shovel or scoop. Residuals should be cleaned up with cloths and/or sawdust. Dispose of the collected material as hazardous waste, according to local regulations.
On water: Confine the spillage. Remove from surface by skimming. Notify local authorities according to regulations.

6.4 Reference to other sections
Personal precautions: see section 8.
Waste treatment methods: see section 13.

## Section 7 Handling and storage

7.1 Precautions for safe handling
General measures for handling lubricant greases should be observed.
Avoid splashing the product.
Avoid contact with skin and eyes.
Ensure washing facilities after working hours and before breaks.
Take off contaminated or oil-soaked clothing immediately, wash with warm water and soap.
After splashing floor may be slippery, use care to avoid falling, contain spills immediately.
When using do not eat, drink or smoke.
Handling temperature: not available

7.2 Conditions for safe storage, including any incompatibilities
Store in dry, well ventilated place in original, tightly closed containers.
Keep away from direct heat, ignition sources and strong oxidizing agents.
Recommended storage temperature: max. 45°C

7.3 Specific end use(s)
Lithium complex lubricating grease.

## Section 8 Exposure controls / personal protection

Engineering control measures:
Not required.

8.1 Control parameters: -

8.2 Exposure controls
Personal protection:

| | |
|---|---|
| Respiratory protection: | Breathing apparatus not required. |
| Hand protection: | Oil resistant gloves (EN 374, Breakthrough time 480 min) (e.g. nitrile rubber – minimal thickness 0.33 mm). Note: Manufacturer's directions for use and the conditions of application should be observed. |
| Eye protection: | Protective goggles. |
| Skin protection: | Protective clothing (oil resistant). |
| Other special: | no data |

Environmental exposure controls:
Do not discharge into drains/surface waters/groundwater.

## Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance:

| | |
|---|---|
| Physical state: | consistent |
| Colour: | darkblue |
| Odour: | characteristic |
| Change in physical state: | During long-time storage, oil separation may occurs on the surface. |
| Dropping point (ISO 2176): | typ. 270°C |
| Pour point (ISO 3016): | not available |

Others:

| | |
|---|---|
| Flash point (COC) (EN ISO 2592): | > 200°C (base oil) |
| Ignition point (EN ISO 2592): | not available |
| Autoignition temperature: | not available |
| Explosive properties: | not explosive |
| Oxidizing properties: | not oxidize |

| | |
|---|---|
| Vapour pressure at 20°C: | negligible |
| Density at 20°C: | not available |
| Solubility in water: | practically insoluble in water |
| Penetration after working – 60 c, at 25°C (0,1 mm) (ISO 2137): | typ. 280 |
| Change of penetration at 25 ° C, after working 10000, 0.1 mm (ISO 2137) | typ. 20 |
| Kinematic viscosity at 40°C (EN ISO 3104): | typ. 200 $mm^2/s$ (base oil mixture) |
| n-Octanol/water partition coefficient: | not available |
| pH: | not applicable |

9.2 Other information
no data available

## Section 10 Stability and reactivity

| | | |
|---|---|---|
| 10.1 | Reactivity: | Dangerous reactivity not known. |
| 10.2 | Chemical stability: | No decomposition if stored and handled properly. |
| 10.3 | Possibility of hazardous reactions: | Not known. |
| 10.4 | Conditions to avoid: | Direct heat or ignition sources. |
| 10.5 | Incompatible materials: | Strong oxidizing agents. |
| 10.6 | Hazardous decomposition products: | No dangerous decomposition products are formed under normal conditions. Hazardous combustion products: See Section 5. |

## Section 11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

| | | | | |
|---|---|---|---|---|
| Oral: | $LD_{50}$ (rat) | > 2000 | mg/kg | (based on components) |
| Dermal: | $LD_{50}$ (rabbit) | > 2000 | mg/kg | (based on components) |

Acute toxicity: irritation

| | |
|---|---|
| Skin: | not irritant (based on components) |
| Note: | Prolonged and/or repeated contact may cause irritation on skin depending on individual sensitivity. |

Eye: irritant (based on components), causes serious eye irritation

Respiratory or skin sensitisation: not sensitising (based on components)

Other information, specific effects:

The product does not contain PCBs, PCTs, and other chlorine compounds, and heavy metals, barium compounds.

Note L: The classification as a carcinogen need not apply according to 1272/2008/EC, because it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346.

| | |
|---|---|
| Germ cell mutagenicity: | not known, resp. not mutagen (based on components) |
| Carcinogenicity: | not known, resp. not carcinogen (based on components) |
| Reproductive toxicity: | not known, resp. no reproduction-damaging effect (based on components) |
| STOT-single exposure: | not classified |
| STOT-repeated exposure: | not classified |
| Aspiration hazard: | not classified |

## Section 12 Ecological information

| | | |
|---|---|---|
| 12.1 | Toxicity | No data available. |
| | Aquatic organisms: | |
| | Soil organisms: | |
| | Plants: | |
| 12.2 | Persistence and degradability | |
| | Biodegradability: | No data available. |
| 12.3 | Bioaccumulative potential | No data available. |
| 12.4 | Mobility | |
| | Mobility in soil: | Soil is not mobile. |
| | Mobility in water: | Floats on water. Does not form continuous layer. |
| 12.5 | Results of PBT and vPvB assessment | Does not contain PBT and vPvB substances. |
| 12.6 | Other adverse effects | |
| | Heavy metal content: | None. |

| | |
|---|---|
| PCT, PCB and other chlorinated hydrocarbons: | None. |
| Environmental effects: | Large spillages may be hazardous to the environment. |
| Water hazard class (German): | WGK 1 (Classification by VwVwS) |

## Section 13 Disposal considerations

13.1 Waste treatment methods

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.
Waste Identification Code: 12 01 12*
Spent waxes and fats.
Disposal must be in compliance with national and local regulations.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.
Waste Identification Code: 15 01 10*
Packaging containing residues of or contaminated by dangerous substances.
Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: incineration

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

## Section 14 Transport information

Land transport:

Road/ Railway ADR/RID: Not classified.

| | | |
|---|---|---|
| 14.1. | UN number: | - |
| 14.2. | UN proper shipping name: | - |
| 14.3. | Transport hazard class(es): | - |
| 14.4. | Packing group: | - |

14.5. Environmental hazards: -
14.6. Special precautions for user: -

Waterways:
Inland waterways/ Sea transport ADN/IMDG: Not apply to the product.

Air transport: ICAO / IATA: Not apply to the product.

**Section 15 Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the mixture.
This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2015/830/EU) and to Regulation (EC) 1272/2008.

15.2 Chemical safety assessment.
not available

**Section 16 Other information**

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.
The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Source of data presented in this material safety data sheet:
Test results of this product
Hungarian lists of dangerous substances, 1272/2008/EC regulation, Annex XVII. of REACH
Relevant Hungarian and EC regulation

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 (CLP)
Eye Irrit. 2 H319 (calculated)

*The full text of each relevant Hazard classes and cat., H- phrase in Section 3.:*

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |

| | |
|---|---|
| Acute Tox. 4 | Acute toxicity Category 4 |
| Asp.Tox.1 | Aspiration hazard Category 1 |
| Skin Corr. 1B | Skin corrosion/irritation Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| Eye Dam. 1 | Serious eye damage/eye irritation Category |
| Eye Irrit. 2 | Serious eye damage/eye irritation Category 2 |
| STOT SE 3 | Specific target organ toxicity — single exposure Category 3 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment, Chronic Category 2 |

Legend:

| | |
|---|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Biocontrentration Factor |
| BOD | Biological Oxigen Demand |
| Bw | Body Weight |
| C&L | Classification and Labeling |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| CMR | Carcigonic, Mutagenic or toxic to Reproduction |
| COD | Chemical Oxygen Demand |
| CSA | Chemical Safety Assessment |
| CSR | Chemical Safety Report |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No Effect Level |
| ECHA | European Cheamicals Agency |
| Ecx | Effective Concentration x% |
| Edx | Effective Dose x% |
| ELINCS | European List of Notified Chemical Substances |

| | |
|---|---|
| ErC50 | EC50 in terms of reduction of growth rate; |
| ES | Exposure Scenario |
| ESIS | European Chemical Substances Information System |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal Concentration x% |
| LDx | Lethal Dose x% |
| LOAEC | Lowest Observed Adverse Effect Concentration |
| LOAEL | Lowest Observed Adverse Effect Level |
| LOEC | Lowest Observed Effect Concentration |
| LOEL | Lowest Observed Effect Level |
| NOEC | No observed effect concentration |
| NOEL | No observed effect level |
| NLP | No-Longer Polymer |
| NOAEL | No Observed Adverse Effect Level |
| OECD | Organisation for Economic Cooperation and Development |
| PBT | Persistent Bioaccumulative and Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SVHC | Substance of Very High Concern |
| UVCB | substance of unknown or variable composition, complex reaction products or biological materials |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and very Bio-accumulative |

Revision Indicators:

| Section | Subject of change | Date | Version |
|---|---|---|---|
| | | | |