

# SAFETY DATA SHEET

MOL-LUB Ltd.

Trade name: **MOL Favorit 2 lithium complex lubricating grease**

Version: 2      Latest revision: 01. 08. 2008      Date of issue: 20. 06. 2007      Page: 1/(8)

## 1. Identification of the substance / preparation and of the company

Product name:

MOL Favorit 2

Product type / recommended uses:

preparation / lithium complex lubricating grease

Manufacturer / Supplier identification:

MOL-LUB Lubricant Production Trade and Service Limited Liability Company

H-2931 Almásfüzitő, Fő u. 21., Hungary

Phone / Fax: +36 34 526 330 / +36 34 526 391

Request SDS of:

MOL-LUB Lubricant Production Trade and Service Limited Liability Company

Customer Service Center

H-2931 Almásfüzitő, Fő u. 21., Hungary

Phone / Fax: +36 80 201 296 / +36 34 348 010

Responsible for SDS:

MOL-LUB Ltd. Csaba Horváth, head of HSE and QOP

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Technical information:

MOL-LUB Ltd. Product Development and Technical Service

H-1117 Budapest, Október huszonharmadika u. 18., Hungary

Phone/Fax: +36 80 201 296 or +36 1 464 0236 / +36 1 464 0304

Emergency telephone (07-15<sup>20</sup> h): +36 34 526 210

Health Toxicological Information Service (ETTSZ 1096 Budapest, Nagyvárad tér 2.)

Tel.: +36 1 476 6464, or +36 80 201 199

## 2. Hazards identification

Human health hazards:      Danger symbol not required.

Note:      Prolonged and/or repeated contact may cause irritation, depending on individual sensitivity (see also Protective equipment).

Safety hazards:      Danger symbol not required.

Environmental hazards:      Danger symbol not required.

Note:      Large spillages may be hazardous to the environment.

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### 3. Composition / information on ingredients

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

Ingredients / Hazardous components:

Name	EINECS number	CAS number	Hazard symbol	Risk phrase	Conc. %(m/m)
Lubricating oils (petroleum), C17-C32*	309-875-6	101316-70-5	-	-	max. 50
Lubricating oils (petroleum), C24-C50*	309-877-7	101316-72-7	-	-	max. 20
Sulfurized vegetable oil	304-821-2	94279-76-2	Xi	R 36/38	max. 3.0
0,0,0-triphenyl phosphorotioate	209-909-9	597-82-0	-	R 53	max. 0.4
Polyisobutenyl succinic acid anhydride	-	67762-77-0	Xi	R 36/37	max. 5.2
Zinc alkyl dithiophosphate	272-028-3	68649-42-3	Xi	R 36/38	max. 3.0
Lithium hydroxide monohydrate	215-183-4	1310-66-3	C, Xn	R 20, R 35	max. 0.1
Olefin sulfide	confidential		-	R 53	max. 1.5

\*: with exposure limit

The full text of each relevant R phrase see in Section 16.

### 4. First aid measures

General information: Never give anything by mouth to an unconscious person, or never induce vomiting.

Inhalation: -

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

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

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

Note to physician:

## 5. Fire-fighting measures

Fire hazards:

Moderately hazardous (see also Section 9 - flash point).

Suitable extinguishing media:

Sand, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:

Water jet.

Hazardous decomposition products:

On burning, carbon monoxide, carbon dioxide, sulphur oxides, phosphor oxides, various hydrocarbons and soot can be formed.

Special protective equipment:

According to the existing fire-fighting regulations.

Further information:

-

## 6. Accidental release measures

Personal precautions:

See Section 8.

Environmental precautions:

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

Clean-up procedures / recovery

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.

## 7. Handling and storage

Handling:

General measures for handling lubricant greases should be observed.

No special handling procedures are required.

When using do not eat, drink or smoke. Avoid splashing the product.

Handling temperature:

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**Storage:**

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: (-5°C) – (+40°C)

**Specific application:**

See product sheet.

## 8. Exposure controls / personal protection

**Engineering control measures:**

Not required.

**Exposure limits:**

**Mineral oil mist:** TWA: **5 mg/m<sup>3</sup>**; STEL: 10 mg/m<sup>3</sup>, for oil mist, vapour excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

**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).

Eye protection: Protective goggles not required.

Skin protection: Protective clothing (oil resistant).

Other special:

**General protective measures / hygiene:**

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.

**Environmental exposure controls:**

Do not discharge into drains/surface waters/groundwater.

## 9. Physical and chemical properties

**Appearance:**

Physical state: consistent

Colour: brown, homogenous

Odour: characteristic

**Change in physical state:**

Dropping point (ISO 2176): typ. 280°C

Boiling point:

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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:	
Vapour pressure at 20°C:	negligible
Density at 20°C:	not available
Solubility in water:	practically insoluble in water
n-Octanol/water partition coefficient:	not available
Viscosity:	not available
Vapour density:	not available
Evaporation rate:	not available
Heating value:	
Penetration after working – 60 c, at 25°C (0,1 mm) (ISO 2137):	typ. 280
pH:	not applicable

## 10. Stability and reactivity

Stability:	No decomposition if stored and handled properly.
Conditions to avoid:	Direct heat or ignition sources.
Materials to avoid:	Strong oxidizing agents.
Hazardous decomposition products:	On burning, carbon monoxide, carbon dioxide, sulphur oxides, phosphor oxides, various hydrocarbons and soot can be formed. Under normal conditions no dangerous decomposition products are formed.

Notes:

## 11. Toxicological information

Acute toxicity:

Oral:	LD <sub>50</sub> (rat)	> 2000	mg/kg	(based on components)
Dermal:	LD <sub>50</sub> (rabbit)	> 2000	mg/kg	(based on components)

Acute toxicity: irritation

Skin:	not irritant (based on components)
Eye:	not irritant (based on components)
Note:	Prolonged and/or repeated contact may cause irritation, depending on individual sensitivity (see also Protective equipment).

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Sensitization: not sensitising (based on components)

Chronic toxicity: not known

Other information, specific effects:

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

The base oil(s) contain(s) less than 3% DMSO extract (IP 346), therefore not classified as carcinogenic material according to 67/548/EEC NOTE L.

Carcinogen effect: not known, resp. not carcinogen (based on components)

Mutagen effect: not known, resp. not mutagen (based on components)

Reproduction-damaging effect: not known, resp. no reproduction-damaging effect (based on components)

## 12. Ecological information

Mobility: Floats on water. Does not form continuous layer. Absorbs in soil.

Degradability / persistence:

Biodegradability:

Bioaccumulative potential:

Ecotoxicity: Not available.

Aquatic organisms:

Soil organisms:

Plants:

Biological oxygen demand:

Chemical oxygen demand:

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):

## 13. Disposal considerations

Product disposal:

Wastes of the product or used oil should be treated as hazardous waste.

EWC cod: 12 01 12\*

spent waxes and fats

Disposal must be in compliance with national and local regulations.



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## 16. Other information

Recommended application / restrictions:

See product sheets.

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.

This safety data sheet has been prepared according to Regulation (EC) No 1907/2006, Directives 88/379/EEC and 1999/45/EC.

Source of data presented in this material safety data sheet:

Test results of this product

Material safety data sheets of product's components

Hungarian and EU lists of dangerous substances

Relevant Hungarian regulation and EU directives

CONCAWE database

*The full text of each relevant R phrase in Section 3.:*

R 20 Harmful by inhalation

R 35 Causes severe burns

R 36/37 Irritating to eyes and respiratory system

R 36/38 Irritating to eyes and skin

R 53 May cause long-term adverse effects in the aquatic environment

Revision Indicators:

Section	Subject of change	Date	Version
3	Composition / information on ingredients	01.08.2008	2
16	The full text of each relevant R phrase in Section 3		
1-16	Other corrections		