

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC

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

Version: 4 Latest revision: 01. 08. 2012 Date of issue: 20. 06. 2007 Page: 1/(11)

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

1.1 Product identifier:

MOL Favorit 2 lithium complex lubricating grease

1.2 Relevant identified uses of the mixture 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

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 HSE, SD and QOP

Phone: +36 34 526 343; Mobile: +36 20 474 2644

e-mail: csahorvath@mol.hu

Technical information:

MOL-LUB Ltd. Product Development and Technical Service

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

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

1.4 Emergency telephone number

Emergency telephone (on workdays: 07-15²⁰ h (CET)): +36 34 526 210

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

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

National Health Toxicological Information Service:

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2. Hazards identification

2.1 Classification of the mixture

2.1.1 Classification of the mixture according to regulation (EC) No 1272/2008

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

2.1.2 Classification of the mixture according to regulation (EC) No 1999/45

Human health hazards:	Xi (irritant)
R 36	Irritating to eyes.
Note:	Prolonged and/or repeated contact may cause irritation on skin 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.

2.2 Label elements (EC) No 1272/2008

Product identification:

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

Pictogram:



Signal word: **Warning**

Hazard statement:

H319 Causes serious eye irritation.

Precautionary statements – Prevention:

P280 Wear eye protection.

P273 Avoid release to the environment.

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.

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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
no data available

3. Composition/information on ingredients

3.1 Mixtures

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

Component / Hazardous component(s):

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
Lubricating oils (petroleum), C24-C50* Registration Nr.: 01-2119489969-06	309-877-7	101316-72-7	67/548/EEC: - (Note L) 1272/2008/EC: Asp.Tox.1 (Note L)	- H304	max. 75
Lubricating oils (petroleum), C>25* Registration Nr.: 01-2119486987-11	309-874-0	101316-69-2	67/548/EEC: - (Note L) 1272/2008/EC: - (Note L)	- -	
Polyisobutenyl succinic acid anhydride 		67762-77-0	67/548/EEC: Xi 1272/2008/EC Eye Irrit. 2 STOT SE 3	R 36/37 H319 H335	max. 5.6
Zinc alkyl dithiophosphate 	272-028-3	68649-42-3	67/548/EEC Xi, N 1272/2008/EC: Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 2	R 38, R 41, R 51/53 H315 H318 H411	max. 3.0


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Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
Lithium hydroxide monohydrate 	215-183-4	1310-66-3	<i>67/548/EEC</i> C, Xn <i>1272/2008/EC:</i> Skin Corr. 1B Acute Tox. 4	R 34, R 22 H314 H302	max. 0.1

*: with exposure limit

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

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.

4.2 Most important symptoms and effects, both acute and delayed

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4.3 Indication of any immediate medical attention and special treatment need

Not required.

5. Fire-fighting measures

Fire hazards:

See also Section 9 - flash point.

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5.1 Extinguishing media

Suitable extinguishing media:

Sand, carbon dioxide, dry chemical powder.

Unsuitable extinguishing media:

Water jet.

5.2 Special hazards arising from the mixture

Hazardous combustion products:

On burning, carbon monoxide, carbon dioxide, sulphur oxides, phosphor oxides, 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:

-

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.

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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.

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 if splashes may occur.

Skin protection: Protective clothing (oil resistant).

Other special: no data

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state:	consistent
Colour:	yellow, homogenous
Odour:	characteristic

Change in physical state:

Dropping point (ISO 2176):	typ. 280°C
Pour point:	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
n-Octanol/water partition coefficient:	not available
Penetration after working – 60 c, at 25°C (0,1 mm) (ISO 2137):	typ. 280
pH:	not applicable

9.2 Other information

no data available

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, open flames.
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.

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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)

Respiratory or skin sensitisation: 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.

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.

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)

Repeated dose toxicity: not known

12. Ecological information

12.1 Toxicity No data available.

Aquatic organisms:

Soil organisms:

Plants:

12.2 Persistence and degradability

Biodegradability: No data available.

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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	Not required.
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):	-

13. Disposal considerations

13.1 Waste treatment methods

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.

Packaging disposal:

Containers with product residue should also be treated as hazardous waste according to national and local disposal regulations.

EWC cod: 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.

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

R 22	Harmful if swallowed.
R 34	Causes burns.
R 36/37	Irritating to eyes and respiratory system.
R 38	Irritating to skin.
R41	Risk of serious damage to eyes.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
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

Revision Indicators:

Section	Subject of change	Date	Version
3 16 1-16	Composition / information on ingredients The full text of each relevant R phrase in Section 3 Other corrections	01.08.2008	2
3 9 16	Composition / information on ingredients Physical and chemical properties The full text of each relevant R phrase in Section 3.	05.05.2010	3
2 3 11 1-16	Hazards identification Composition/information on ingredients Toxicological information Revision modification according to 453/2010/EC and 1272/2008/EC	01.08.2012	4