



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 1/(13)

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

1.1      Product identifier:

**MOL Liton LT 2EP lithium-base lubricating grease**

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

Relevant identified uses: lithium-base lubricating grease

Uses advised against: no data

1.3      Details of the supplier of the safety data sheet:

MOL-LUB Lubricant Production Distribution 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 Distribution 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<sup>20</sup> 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:



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 2/(13)

### 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 Liton LT 2EP lithium-base 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:

<b>P280</b>	Wear eye/face protection.
<b>P273</b>	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.

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.



# SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 3/(13)

## 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 and synthetic oil based consistent lubricant containing lithium soap and additives.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Distillates (petroleum), solvent-dewaxed heavy paraffinic C20- C50* REACH Registr. Nr.: 01-2119471299-27	265-169-7	64742-65-0	- (Note L)	-	max. 70
Distillates (petroleum), hydrotreated heavy naphthenic REACH Registration Nr.: 01-2119467170-45	265-155-0	64742-52-5	- (Note L)	-	max. 20
Lubricating oils (petroleum), C24- C50 REACH Registr. Nr.: 01-2119489969-06	309-877-7	101316-72-7	- (Note L)	-	max. 5
Lubricating oils (petroleum), C18-40* REACH Registr. Nr.: 01-2119486987-11	305-594-8	94733-15-0	- (Note L)	-	max. 5
Zinc alkyl dithiophosphate	272-028-3	68649-42-3	Skin Irrit. 2 Eye Dam. 1 Aquatic Chronic 2	H315 H318 H411	max. 1.5

\*: with exposure limit

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



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 4/(13)

### 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:

Sand, 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, various hydrocarbons and soot can be formed.



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 5/(13)

### 5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations.

Further information:

Collect contaminated fire fighting 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



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 6/(13)

- 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-base 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:	Tightly fitting safety 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:	brown, homogenous
Odour:	characteristic

Change in physical state:

Dropping point (ISO 2176):	typ. 195°C
Pour point:	not available



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 7/(13)

### 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

## 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, 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. |

## Section 11 Toxicological information

### 11.1 Information on toxicological effects

#### 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)
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)



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 8/(13)

### 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)



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 9/(13)

### 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.

Recommended waste treatment method: incineration

##### 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.

##### 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.



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 10/(13)

### 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 2015/830 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 EU 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.:*

H315                      Causes skin irritation.

H318                      Causes serious eye damage.

H411                      Toxic to aquatic life with long lasting effects.



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 11/(13)

Skin Irrit. 2	Skin corrosion/irritation Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
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	Bioconcentration Factor
BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labeling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, 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 Chemicals Agency
Ec <sub>x</sub>	Effective Concentration x%
Ed <sub>x</sub>	Effective Dose x%
ELINCS	European List of Notified Chemical Substances
ErC <sub>50</sub>	EC <sub>50</sub> 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
LC <sub>x</sub>	Lethal Concentration x%
LD <sub>x</sub>	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



# SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 12/(13)

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
3	Ingredients / Hazardous components	24.04.2008	2
3	Ingredients / Hazardous components	01.08.2008	3
16	The full text of each relevant R phrase in Section 3		
1-16	Other corrections		
2	Hazards identification	16.09.2011	4
3	Composition/information on ingredients		
5	Fire-fighting measures		
12	Ecological information		
16	Other information		
1-16	Revision modification according to 453/2010/EC		
3	Composition/information on ingredients	01.08.2012	5
1-16	Revision modification according to 1272/2008/EC		
2	Hazards identification	27.09.2013	6
3	Composition/information on ingredients		
4	First aid measures		
11	Toxicological information		
12	Ecological information		
1	Details of the supplier of the safety data sheet, Responsible for SDS	17.06.2015	7
2	Other hazards		
3	Composition/information on ingredients		
5	Fire hazards		
12	Ecological information		
14	Transport information		
1-16	Other corrections, revision modification according to 2015/830 /EC		



## SAFETY DATA SHEET

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC **MOL-LUB Ltd.**

Trade name: **MOL Liton LT 2EP lithium-base lubricating grease**

Version: 9      Latest revision: 29. 06. 2017      Date of issue: 20. 06. 2007      Page: 13/(13)

### Revision Indicators:

Section	Subject of change	Date	Version
1-16	Other corrections	01.06.2016	8
3	Composition/information on ingredients	29.06.2017	9