

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 1/(12)

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

1.1 Product identifier:

MOL Dynamic Moto Chain O-X moto chain oil with teflon

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: moto chain oil with teflon

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 SD and HSE
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 (07-15²⁰ h): +36 34 526 210 (CET) on workdays

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:

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 2/(12)

2. Hazards identification

2.1 Classification of the substance according to regulation 1999/45/EC

Human health hazards: Xn (harmful)
R 65 Harmful: may cause lung damage if swallowed.
R 66 Repeated exposure may cause skin dryness or cracking.
R 67 Vapours may cause drowsiness and dizziness.

Safety hazards: F+ (extremely flammable)
R 12 Extremely flammable.

Environmental hazards: N (dangerous for the environment)
R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Product identification: Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Danger symbol(s) and indication(s):



extremely flammable



harmful



dangerous for the environment

Hazardous substance(s): n-Pentane (CAS: 109-66-0)

The packaging must bear the inscription: -

R-phrases: R 12 Extremely flammable.
R 65 Harmful: may cause lung damage if swallowed.
R 66 Repeated exposure may cause skin dryness or cracking.
R 67 Vapours may cause drowsiness and dizziness.
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 3/(12)

S-phrases: S 23 Do not breathe gas/spray.
 S 24/25 Avoid contact with skin and eyes.
 S 62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

 S 51 Use only in well-ventilated areas.
 S 60 This material and its container must be disposed of as hazardous waste.

 S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Other liabilities for labelling:

Tactile warning of danger: Distribution for population.

Transport classification: see section 14.


2.3 Other hazards
no data available

3. Composition/information on ingredients

3.1 Mixtures

Chemical description: Mixture of highly refined mineral base oil, synthetic oil, solvent, containing additives.

Component(s) / Hazardous component(s):

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
n-Pentane 	203-692-4	109-66-0	<i>67/548/EEC:</i> F ⁺ , Xn, N <i>1272/2008/EC:</i> Flam. Liq. 2 Asp. Tox. 1 STOT SE 3 Aquatic Chronic 2	R 12, R 65, R 66, R 67, R 51/53 H225 H304 H336 H411	max. 70
Synthetic oil (polybutene)	-	9003-26-6	<i>67/548/EEC:</i> - <i>1272/2008/EC:</i> -	- -	max. 70
White mineral oil (petroleum)* REACH Registr. szám: 05-2114111021-79	232-455-8	8042-47-5	<i>67/548/EEC:</i> - <i>1272/2008/EC:</i> -	- -	max. 20

SAFETY DATA SHEET**MOL-LUB Ltd.**

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 4/(12)

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
Lubricating oils (petroleum), C24-C50*	309-877-7	101316-72-7	67/548/EEC: - (Note L) 1272/2008/EC: Asp.Tox.1 (Note L)	- H304	max. 5
Lubricating oils (petroleum), C>25*	309-874-0	101316-69-2	67/548/EEC: - (Note L) 1272/2008/EC: - (Note L)	- -	

*: 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. If rapid recovery does not occur, obtain medical attention.

Skin contact: Wash skin with large amounts of water, use soap. In case of persistent irritation, get medical attention.

Eye contact: Wash affected eyes for at least 15 minutes under running water with eyelids held open. Get medical attention.

Ingestion: Do not induce vomiting. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment need

In case of ingestion.

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 5/(12)

5. Fire-fighting measures

Fire hazards:

See also Section 9 - flash point.

5.1 Extinguishing media

Suitable extinguishing media:

Carbon dioxide, dry chemical powder, water spray.

Unsuitable extinguishing media:

Water jet.

5.2 Special hazards arising from the mixture

Hazardous combustion products:

On burning, carbon dioxide, carbon monoxide, hydrocarbons and soot can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Wear a self-contained breathing apparatus and full turnout gear.

Further information:

Product will form flammable/explosive vapour-air mixtures.

Water spray for cooling.

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.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Sufficient ventilation should be provided.

Keep unnecessary personnel away.

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: All kind of ignition sources should be remove. Sufficient ventilation should be provided. Contain spilled liquid with sand, earth or other suitable absorbents. Storage and dispose of according to local regulations.

On water: Confine the spillage. Remove from surface by skimming or suitable absorbents. Notify local authorities according to regulations.

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 6/(12)

6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with lubricants and extremely flammable liquids.

Ensure adequate ventilation.

Keep away from radiant heat and open flame. Do not smoke.

Avoid contact with skin and eyes. Avoid prolonged breathing of oil vapours or mists.

Ensure washing facilities after working hours and before breaks. Take off contaminated or oil-soaked clothing, wash with warm water and soap.

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

Handling temperature: not known

7.2 Conditions for safe storage, including any incompatibilities

Storage facilities must comply with regulations for storing of extremely flammable liquids.

Store in dry, well ventilated place in original, closed containers.

Keep away from radiant heat, direct sunshine, open flame and strong oxidizing agents.

Storage temperature: ambient (below 35 ° C)

7.3 Specific end use(s)

Moto chain oil with teflon.

8. Exposure controls / personal protection

Engineering control measures:

Adequate ventilation.

8.1 Control parameters: By the national regulation

Mineral oil mist: TWA: **5 mg/m³**; STEL: 10 mg/m³, for oil mist, vapour excluded (ACGIH).

Method of testing, recommended: NIOSH 5026

8.2 Exposure controls

Personal protection:

Respiratory protection: In case of inadequate ventilation use a half face filter mask or other respiratory protection.

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 7/(12)

Hand protection: protective gloves, solvent resistant, in case of regularly exposition (EN 374).
Note: Manufacturer's directions for use and the conditions of application should be observed.

Eye protection: Protective goggles not required.

Skin protection: Protective clothing.

Other special: no data

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

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: liquid
Colour: colourless
Odour: mild

Change in physical state:

Pour point (ISO 3016): not available
Boiling point: not available

Others:

Flash point (COC) (EN ISO 2592): < -40°C
Ignition point (EN ISO 2592): not available
Autoignition temperature: not available
Explosive properties: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Oxidizing properties: not oxidize
Vapour pressure at 20°C: negligible
Density at 15°C (EN ISO 12185): typ. 0.721 g/cm³
Solubility in water: practically insoluble in water
Solubility in other solvents: gasoline, kerosene, toluene, etc.
n-Octanol/water partition coefficient: not available
Vapour density: not available
Kinematic viscosity at 40°C (EN ISO 3104): not available
Kinematic viscosity at 100°C (EN ISO 3104): not available
pH: not applicable

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 8/(12)

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, strong sunlight.
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.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No data for the product.

Oral: Note: Harmful: may cause lung damage if swallowed.

Dermal:

Inhalation: Note: Vapours may cause drowsiness and dizziness

Component:

n-Pentane:

Oral: LD₅₀ (rat) >5000 mg/kg

Dermal: LD₅₀ (rabbit) 3000 mg/kg

Inhalation: LC₅₀ (mouse) 295 mg/l/2 h

Acute toxicity: irritation

Skin: not irritant (based on components)

Note: Repeated exposure may cause skin dryness or cracking.

Eye: not irritant (based on components)

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

Chronic toxicity: not known

Repeated dose toxicity: not known

Other information, specific effects:

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

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 9/(12)

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)
Aspiration hazard:	Harmful: may cause lung damage if swallowed.

12. Ecological information

- | | |
|--|---|
| 12.1 Toxicity | No data for the product. |
| Aquatic organisms: | |
| Soil organisms: | |
| Plants: | |
| 12.2 Persistence and degradability | No data available. |
| Biodegradability: | No data available. |
| 12.3 Bioaccumulative potential | No data available. |
| 12.4 Mobility | |
| Mobility in soil | Absorbs in soil. |
| Mobility in water: | Floats on water. The most part of the product is very volatile. |
| 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: | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| Water hazard class (German): | |

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 10/(12)

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: 13 02 05*

Mineral-based non-chlorinated engine, gear and lubricating oils.

EWC cod: 14 06 03*

Other solvents and solvent mixtures.

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.

EWC cod: 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.

14. Transport information

Land transport:

Road/ Railway	ADR/RID:
Class:	3
Classification code:	F1
Labels:	3
Packaging group:	I
Limited and excepted quantities:	0 E3
Transport category:	1 (D/E)
Hazard identification No.:	33
UN No.:	1265
Name and description:	PENTANES, liquid

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 11/(12)

Waterways:

Inland waterways/ Sea transport	ADN/IMDG:
Class:	3
Labels:	3
Packaging group:	I
EmS No.:	no data
UN No.:	1265
Name and description:	PENTANES, liquid

Air transport:

	ICAO / IATA:
Class:	3
Labels:	3
Packaging group:	I
UN No.:	1265
Name and description:	PENTANES, liquid

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 1907/2006/EC (mod.: 453/2010/EC).

15.2 Chemical safety assessment.
not available

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.

SAFETY DATA SHEET

MOL-LUB Ltd.

according to regulation 1907/2006/EC (REACH)

Trade name: **MOL Dynamic Moto Chain O-X moto chain oil with teflon**

Version: 2 Latest revision: 19. 02. 2013 Date of issue: 30. 07. 2008 Page: 12/(12)

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

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

R 12	Extremely flammable.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 65	Harmful: may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.
R 67	Vapours may cause drowsiness and dizziness.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
Flam. Liq. 2	Flammable liquid Category 2
Asp.Tox.1	Aspiration hazard Category 1
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 1-16	Composition/information on ingredients Regulatory information, other corrections Revision modification according to 453/2010/EC	19.02.2013	2