

SAFETY DATA SHEET

MOL-LUB Ltd.

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

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

Version: 4 Latest revision: 13. 03. 2012 Date of issue: 27. 03. 2008 Page: 1/(13)

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

1.1 Product identifier:

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

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses: **moto chain spray 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 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 (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:

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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:

Flam. Aerosol 1 H222 Extremely flammable material.

STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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

Human health hazards: Xn (harmful)

 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 (EC) No 1272/2008

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

Hazardous component: Mixture of propane and butane (CAS number: 75-28-5 & 106-97-8 & 474-98-6)
 n-Pentane (CAS number: 109-66-0)

The packaging must bear the inscription: "Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use."
 Do not spray on a naked flame or any incandescent material."

GHS Pictogram:



Signal word: **Danger**

Hazard statement:

H222 Extremely flammable material.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

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Supplemental hazard information:

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements – Prevention:

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

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: Mixture of highly refined mineral base oil, synthetic oil, solvent, containing additives, with propellant.

Component / Hazardous component(s):

Name	EINECS number	CAS number	Hazard symbol / Hazard classes and cat.	Risk phrase / Hazard statements	Conc. %(m/m)
i-Butane 	200-857-2	75-28-5	67/548/EEC: F ⁺ 1272/2008/EC: Flam. Gas 1 Press Gas	R 12 H220 H280	max. 45
n-Butane* 	203-448-7	106-97-8	67/548/EEC: F ⁺ 1272/2008/EC: Flam. Gas 1 Press Gas	R 12 H220 H280	
Propane 	200-827-9	474-98-6	67/548/EEC: F ⁺ 1272/2008/EC: Flam. Gas 1	R 12 H220	


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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. 40
Synthetic oil (polybutene)	-	9003-26-6	<i>67/548/EEC:</i> - <i>1272/2008/EC:</i> -	-	max. 15
White mineral oil (petroleum)*	232-455-8	8042-47-5	<i>67/548/EEC:</i> - <i>1272/2008/EC:</i> -	-	max. 5

*Note: 1,3-butadiene < 0,1

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: In case of common use it is not possible (aerosol). Do **not** induce vomiting. Get prompt medical attention.

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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.

5. Fire-fighting measures

Fire hazards:

Extremely flammable (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 monoxide, carbon dioxide, various hydrocarbons 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.

The closed containers may rupture with explosive force.

Water spray for cooling.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Sufficient ventilation should be provided.

Keep persons not involved in rescue at a distance.

6.2 Environmental precautions:

Prevent spills from entering into natural water, soil and drains by containing the liquid.

All kind of ignition sources should be remove. Notify relevant authority.

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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: Notify local authorities according to regulations.

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 flammable and explosive materials, press gas.

Use only in a well ventilated area.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking.

Avoid contact with skin and eyes. Avoid prolonged breathing of 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.

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.

Handling temperature:

7.2 Conditions for safe storage, including any incompatibilities

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

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

Keep away from radiant heat, open flame and strong oxidizing agents. Protect from sunlight.

Storage temperature: max. 40°C

7.3 Specific end use(s)

Motorcycle chain clean spray.

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8. Exposure controls / personal protection

Engineering control measures:

Use only in a well ventilated area.

8.1 Control parameters: By the national regulation.

8.2 Exposure controls

Personal protection:

Respiratory protection: Where concentrations in air may exceed the limits given in this section, it is recommended to use a half face filter mask to protect from overexposure by inhalation.

Hand protection: Chemically resistant gloves (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 (mixture without PB gas)

Colour: colourless

Odour: mild

Change in physical state:

Boiling point: not available

Others:

Flash point: < -40°C

Ignition point (EN ISO 2592): not available

Autoignition temperature: not available

Explosive properties: Product will form flammable/explosive vapour-air mixtures.

Oxidizing properties:

Vapour pressure at 20°C: not available

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Density at 15°C (EN ISO 12185):	typ. 0,721 g/cm ³ (mixture without PB gas)
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
Evaporation rate:	not available
Kinematic viscosity at 40°C (EN ISO 3104):	not available
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, strong sunlight. The closed containers may rupture with explosive force.
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:	no data
Dermal:	no data
Inhalation:	no data
Note:	Vapours may cause drowsiness and dizziness.

Component:

Propane:

Oral:	no data
Dermal:	no data
Inhalation:	LC ₅₀ (rat) >800 000 ppm/4 h 15 s (literature)

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n-Butane:

Oral:	no data		
Dermal:	no data		
Inhalation:	LC ₅₀ (rat)	277 000 ppm/4 h	(literature)

i-Butane:

Oral:	no data		
Dermal:	no data		
Inhalation:	LC ₅₀ (rat)	277 000 ppm/4 h	(literature)

n-Pentane:

Oral:	LD ₅₀ (rat)	>5 000 mg/kg	
Dermal:	LD ₅₀	3 000 mg/kg	
Inhalation:	LC ₅₀	295 mg/l/2óra	

Acute toxicity: irritation

Skin:	irritant (based on components)
Eye:	not irritant (based on components)

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

Chronic toxicity: Repeated exposure may cause skin dryness or cracking.

Repeated dose toxicity: not known

Other information, specific effects:

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

12.1 Toxicity Not available for the product.

Aquatic organisms:

Soil organisms:

Plants:

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12.2	Persistence and degradability	No data available.
	Biodegradability:	No data available.
12.3	Bioaccumulative potential	
12.4	Mobility	
	Mobility in soil	Absorbs on 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 life with long lasting effects.
	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: 16 05 04*

Gases in pressure containers (including halons) containing dangerous substances.

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.

EWC cod: 15 01 11*

Metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers.

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: incineration

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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:	2
Class code:	5F
Hazard label:	2.1
Mennyiségi korlát:	LQ2
UN number:	1950
Name:	AEROSOLS FLAMMALE, N.O.S.

Waterways:

Inland waterways/ Sea transport	ADN/IMDG:
Class:	2
Hazard label:	2.1
EMS number:	F-D S-U
Quantitative restrictions:	IMDG classification, section 3.4
Cartons up to 30 kg. Marking see	Road transport
UN number:	1950
Name:	AEROSOLS FLAMMALE, N.O.S.

Air transport:

	ICAO / IATA:
Class:	2.1
UN number:	1950
Name:	AEROSOLS FLAMMALE, N.O.S.

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 and to Regulation (EC) 1272/2008.

15.2 Chemical safety assessment.
not available

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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

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.:

Flam. Aerosol 1	H222	(calculated)
STOT SE 3	H336	(calculated)
Aquatic Chronic 2	H411	(calculated)

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

R 11	Highly flammable.
R 12	Extremely flammable.
R 36	Irritating to eyes.
R 38	Irritating to skin.
R 48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 62	Possible risk of impaired fertility.
R 65	Harmful: may cause lung damage if swallowed.
R 67	Vapours may cause drowsiness and dizziness.

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H220	Extremely flammable gas
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure through prolonged or repeated exposure (state route of exposure: inhalation).
H411	Toxic to aquatic life with long lasting effects.
Flam. Gas 1	Flammable gas Category 1
Flam. Liq. 2	Flammable liquid Category 2
Press Gas	Liquefied gas
Asp. Tox. 1	Aspiration hazard Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
Repr. 2	Reproductive toxicity Category 2
STOT RE 2	Specific target organ toxicity – repeated exposure Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment, Chronic Category 2

Revision Indicators:

Section	Subject of change	Date	Version
1	Name	30.07.2008	2
3	Composition / information on ingredients		
9	Physical and chemical properties		
1-16	Changing of regulation	25.05.2010.	3
3. 1-16	Composition/information on ingredients Revision modification according 453/2010/EC and 1272/2008/EC	2012.03.13	4