

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 1/(14)

SECTION 1 Identification of the mixture/substance and of the company/undertaking

1.1 Product identifier:

MOL Makromil 300 universal metalworking fluid

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

Relevant identified uses: universal metalworking fluid.

Uses advised against: distribution for population.

1.3 Details of the supplier of the safety data sheet:

MOL-LUB Lubricant Production Distribution and Service Ltd.

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 Ltd.

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: 07-15²⁰ h CET): +36 34 526 210

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

Tel.: +36 80 201 199 (0-24 h, free number).

National Health Toxicological Information Service:

SECTION 2 Hazards identification

2.1 Classification of the mixture or substance

Hazard Class and Category:

Skin Sens. 1

Hazard statement:

H317

May cause an allergic skin reaction.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 2/(14)

2.2 Label elements

Product identification: Trade name: **MOL Makromil 300 universal metalworking fluid**

Hazardous components: 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol

GHS Pictogram:



Signal word: **Warning**

Hazard statement:

H317 May cause an allergic skin reaction.

Supplemental hazard information: -

Precautionary statements – General: -

Precautionary statements – Prevention:

P273 Avoid release to the environment.

P280 Wear protective gloves and protective clothing.

Precautionary statements – Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P333 + P313 If skin irritation or rash occurs: 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.

2.3 Other hazards

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 3/(14)

SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixture of refined mineral oils containing additives (low ash content emulsifier, corrosion-inhibitor, antiwear and bactericide-fungicide agents).

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Lubricating oils (petroleum), C18-40* REACH Registr. Nr.: 01-2119486987-11	305-594-8	94733-15-0	Asp.Tox.1 (Note L)	H304	max. 80
Distillates (petroleum), dewaxed light paraffinic, hydrotreated REACH Registr.Nr.: 01-2119488517-24	295-301-9	91995-40-3	Asp.Tox.1 (Note L)	H304	max. 60
Distillates (petroleum), heavy, hydrocracked C15-C39 REACH Registr. Nr.: 01-2119486951-26	265-077-7	64741-76-0	Asp.Tox.1 (Note L)	H304	max. 50
Alcohols, C16-18 and C18-unsatd., ethoxylated REACH Registr. Nr.: 01-2119489407-26	500-236-9	68920-66-1	Skin Irrit. 2	H315	< 5
Fatty acid ethanolamide, ethoxylated		68603-39-4	Skin Irrit. 2 Eye Irrit. 2	H315 H319	< 2
Isotridecanol	248-469-2	27458-92-0	Skin Irrit. 2 Aquatic Acute 1	H315 H400 (M=1)	< 2
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol** REACH Registr. Nr.: no data	225-208-0	4719-04-4	Acute Tox. 4 Skin Sens. 1 Eye Irrit. 2 Acute Tox. 2	H302 H317 H319 H330	<1.5
Pyridine-2-thiol 1-oxide, sodium salt REACH Registr. Nr.: no data	223-296-5	3811-73-2	Acute Tox. 3 Skin Irrit. 2 Eye Irrit. 2 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1	H311 H315 H319 H332 H400 (M=100) H410 (M=10)	max. 0.02

*: with exposure limit

** Specific concentration limit: Skin Sens. 1; H317: C \geq 0.1%

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 Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 4/(14)

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

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

Eye contact: Flush eyes with plenty of water for 10-15 minutes. Obtain immediately medical attention.

Ingestion: If swallowed, give water. **Do not** induce vomiting. Get medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction.

Prolonged and/or repeated contact may cause irritation on skin or in eyes depending on individual sensitivity.

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:

Foam, 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 dioxide, carbon monoxide, nitrogen 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 Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 5/(14)

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Respiratory protection.

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: Contain spilled liquid with sand, earth or other suitable absorbents. Recover free liquid by pumping. Dispose of according to local regulations.

On water: Water miscible in all proportion. 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

Keep general measures applied for normal operations with metalworking fluids.

Keep away from radiant heat and open flame.

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 clothing and wash it before reuse.

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

Handling temperature: no data.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 6/(14)

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.
Storage temperature: 5 – 40°C.

7.3 Specific end use(s)
Universal metalworking fluid.

SECTION 8 Exposure controls / personal protection

Engineering control measures:
Not required.

8.1 Control parameters:
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: Under normal conditions not required. In case of exceeded exposure-limits respiratory protection with particle-filter is recommended.
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: Where splashing is possible, wear safety glasses (EN 166).
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:	liquid
Colour:	brown, clear
Odour:	characteristic

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 7/(14)

Change in physical state:

Pour point (ISO 3016): not available

Boiling point (DIN 51356): not available

Others:

Flash point (COC) (EN ISO 2592): typ. 151°C

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 15°C (EN ISO 12185): 0.870 – 0.890 g/cm³

Solubility in water: water miscible in all proportion

n-Octanol/water partition coefficient: not available

Vapour density: not available

Kinematic viscosity at 40°C (EN ISO 3104): typ. 26 mm²/s

Kinematic viscosity at 100°C (EN ISO 3104): not available

pH (5 vol.% emulsion in water at 20 DH)

DIN 51369: typ. 9.4

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.
- 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: LD₅₀ (rat) > 2000 mg/kg (based on components)

Dermal: LD₅₀ (rabbit) > 2000 mg/kg (based on components)

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 8/(14)

Component:

Lubricating oils (petroleum), C18-C40:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	> 5.53 mg/L

Distillates (petroleum), dewaxed light paraffinic, hydrotreated:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	> 5.53 mg/L

Distillates (petroleum), heavy, hydro cracked C15-C39:

Oral:	LD ₅₀ (rat)	> 5000 mg/kg	(OECD TG 401)
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg	(OECD TG 402)
Inhalation:	LC ₅₀ (rat)	> 5000 mg/m ³	(OECD TG 403)
Inhalation:	NOAEL	> 220 mg/m	(OECD 412)

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Oral:	LD ₅₀ (rat)	500-2000 mg/kg
Dermal:	LD ₅₀ (rabbit)	> 2000 mg/kg
Inhalation:	LC ₅₀ (rat)	0.37 mg/L (4 hours, dust / fog)

Pyridine-2-thiol 1-oxide, sodium salt

Oral:	LD ₅₀ (rat)	750 mg/kg
Dermal:	LD ₅₀ (rabbit)	700 mg/kg
Inhalation:	LC ₅₀ (rat)	1.08 mg/L (4 hours, dust / fog)

Acute toxicity: irritation

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

Respiratory or skin sensitisation: May cause an allergic skin reaction. (based on components).

Other information, specific effects:

NOTE L: The base oil(s) contain(s) less than 3% DMSO extract (IP 346), therefore not classified as carcinogenic material according to 1272/2008/EC.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 9/(14)

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 Not available.

Component:

Lubricating oils (petroleum), C18-C40:

Fish:	LC ₅₀	> 100 mg/L
Daphnia:	EC ₅₀	> 100 mg/L
Other aquatic organisms:	EC ₅₀	> 100 mg/L
Other living beings:	TLM	>1 mg/L

Distillates (petroleum), dewaxed light paraffinic, hydrotreated:

Fish:	LC ₅₀	> 100 mg/L
Daphnia:	EC ₅₀	> 100 mg/L
Other aquatic organisms:	EC ₅₀	> 100 mg/L
Other living beings:	TLM	>1 mg/L

Distillates (petroleum), heavy, hydro cracked C15-C39:

Fish:	LL ₅₀	> 100 mg/L	96 h
Invertebrates:	EL ₅₀	> 10 000 mg/L	48 h
Fish:	NOEL	≥ 100 mg/L	(OECD 203)
Invertebrates:	NOEL	≥ 1000 mg/L	(OECD 202)
Alga:	NOEL	≥ 100 mg/L	72 h (OECD 201)

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Fish: (Cyprinodon variegatus):	LC ₅₀	> 118 ppm	(96 h, sea water)
Daphnia (Daphnia magna):	EC ₅₀	26.1 ppm	(48 h, freshwater)

Pyridine-2-thiol 1-oxide, sodium salt:

Fish:	LC ₅₀	0.0073 mg/L	96 h
Daphnia:	LC ₅₀	0.0092 mg/L	48 h
Daphnia:	EC ₅₀	0.022 mg/L	48 h
Green alga:	EC ₅₀	0.46 mg/L	72 h
Green alga:	NOEC	0.46 mg/L	72 h

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 10/(14)

- | | | |
|------|--|---|
| 12.2 | Persistence and degradability | |
| | Biodegradability: | Hydrocarbons are inherently degradable. |
| | Pyridine-2-thiol 1-oxide, sodium salt: | Readily biodegradable. |
| 12.3 | Bioaccumulative potential | No data available. |
| | Pyridine-2-thiol 1-oxide, sodium salt: | LogPow: -2.64
BCF: 50; (low) |
| 12.4 | Mobility in soil | No data available. |
| | Mobility in water: | Water miscible in all proportion. |
| 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 spills may be hazardous to the environment. |
| | Water hazard class (German): | WGK 1 (Classification by VwVwS) |

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: 13 02 05*

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

Waste Identification Code: 13 01 05* or 12 01 09*

Non-chlorinated emulsions. or

Machining emulsions and solutions free of halogens.

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.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 11/(14)

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:		not classified.
14.2 UN proper shipping name:		not classified.
14.3 Transport hazard class(es):		not classified.
14.4 Packing group:		not classified.
14.5 Environmental hazards:		not classified.
14.6 Special precautions for user:		not classified.

Waterways:

Inland waterways/ Sea transport	ADN/IMDG:	Not apply to the product.
Air transport: ICAO / IATA:		Not apply to the product.

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 1907/2006 (mod.: 2015/830/EU) 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.

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 12/(14)

Source of data presented in this material safety data sheet:

- Test results of this product
- Material safety data sheets of product's components
- 1272/2008/EC regulation, Annex XVII. of REACH
- Relevant Hungarian and EU regulations

Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 (CLP)

Skin Sens. 1 H317 calculated method

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

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Acute Tox. 4.	Acute toxicity Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Acute Tox. 3	Acute toxicity Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Respiratory/skin sensitization Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Acute Tox. 2.	Acute toxicity Category 2
Acute Tox. 4	Acute toxicity Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, Acute Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, Chronic Category 1

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

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 13/(14)

BOD	Biological Oxygen Demand
Bw	Body Weight
C&L	Classification and Labelling
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging (1272/2008/EC)
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 _x	Effective Concentration x%
ErC50	EC50 in terms of reduction of growth rate
Ed _x	Effective Dose x%
EC	European Community
EC number	European Community number
ELINCS	European List of Notified Chemical Substances
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 _x	Lethal Concentration x%
LD _x	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
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts/million
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

SAFETY DATA SHEET



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

Trade name: **MOL Makromil 300 universal metalworking fluid**

Version: 8 Latest revision: 14. 03. 2019 Date of issue: 08. 12. 2008 Page: 14/(14)

Revision Indicators:

Section	Subject of change	Date	Version
9	Physical and chemical properties Other corrections	02.12.2008	2
3 1-16	Composition/information on ingredients Regulatory information, other corrections Revision modification according to 453/2010/EC	18.03.2011	3
9	Physical and chemical properties	18.01.2012	4
2 3 11 1-16	Hazards identification Composition/information on ingredients Toxicological information Revision modification according to 1272/2008/EC	04.04.2013	5
3 9 1-16	Composition/information on ingredients Physical and chemical properties Regulatory information, other corrections	21.03.2014	6
1 3 9 1-16	Details of the supplier of the safety data sheet, Responsible for SDS Composition/information on ingredients Physical and chemical properties Other corrections, revision modification according to 2015/830 /EU	07.03.2016	7
1-16	Full revision due to composition change	14.03.2019	8