



SAFETY DATA SHEET

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

Trade name: **MOL Hygi Fluid disinfectant liquid**

Version: 1

Latest revision:

Date of issue: 16.03.2020.

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

1.1 Product identifier:

MOL Hygi Fluid disinfectant liquid

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

Relevant identified uses: disinfectant liquid

Uses advised against: no data

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

Health Toxicological Information Service (ETT SZ 1096 Budapest, Nagyvárad 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: Hazard statement:

Flam. Liq. 2

H225 Highly flammable liquid and vapour.

Eye Irrit. 2

H319 Causes serious eye irritation.



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2.2 Label elements

Product identification: Trade name: **MOL Hygi Fluid disinfectant liquid**

Hazardous components: -

GHS Pictogram:



Signal word:

Danger

Hazard statement:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

Supplemental hazard information: -

Precautionary statements — General

-

Precautionary statements - Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

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:

P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary statements – Disposal:

P501 Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: required

Transport classification: see section 14.

2.3 Other hazards

Formation of explosive air/steam mixtures is possible.

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



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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixture of water, alcohols and other additives.

Component(s) / Hazardous component(s):

Name	EU number	CAS number	Hazard classes and cat.	Hazard statements	Conc. % (m/m)
Ethanol REACH Registr. Nr.: 01-2119457610-43	200-578-6	64-17-5	Flam. Liq. 2	H225	60-80
Isopropyl alcohol REACH Registr. Nr.: 01-2119457558-25	200-661-7	67-63-0	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	max. 3
Glycerol REACH Registr. Nr.: not necessary	200-289-5	56-81-5	-	-	max. 0,8
Ethyl methyl ketone REACH Registr. Nr.: no data	201-159-0	78-93-3	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	max. 0,8

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

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, place patient in recovery position.

Inhalation: Remove exposed person to fresh air and keep warm. If breathing is difficult, apply artificial respiration or administer oxygen. Get medical attention.

Skin contact: In case of accidental skin contact: remove contaminated clothing. Wash with soap and water.

Eye contact: Flush immediately with plenty of running water for at least 15 minutes, holding the eyelids open. Get medical attention.

Ingestion: Give plenty of water! Get immediately medical attention.

Protection of first-aid person: No individual specifications.

4.2 Most important symptoms and effects, both acute and delayed

In high concentration and prolonged exposure the vapours are narcotic if inhaled.

Inhalation of vapours may cause drowsiness, indisposition, stomachache, headache, depression, and unconsciousness.

Prolonged and/or repeated contact may cause skin irritation, depending on individual sensitivity. May be irritating to eyes.



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4.3 Indication of any immediate medical attention and special treatment need
Treat symptomatically.

SECTION 5 Fire-fighting measures

Fire hazards:

Combustible.

5.1 Extinguishing media

Suitable extinguishing media:

Alcohol resistant foam, dry chemical, water spray, CO₂.

Unsuitable extinguishing media:

No data.

5.2 Special hazards arising from the mixture or substance

Hazardous combustion products:

On burning carbon-monoxide, carbon dioxide can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

Accordance with current regulations.

Recommend wearing self-contained breathing apparatus.

Further information:

Cool containers exposed to fire with water spray from safe distance.

Vapours may form explosive mixture with air.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Keep away from sources of ignition. –No smoking.

6.2 Environmental precautions:

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

Notify relevant authority.

6.3 Methods and material for containment and cleaning up

On soil: Exclude source of ignition. Adequate ventilation required in closed space.

Recover free liquid by pumping. Contain spilled liquid with sand, earth or other suitable absorbents. Dispose of according to local regulations. Clean up with large amount of water the contaminated area.

On water: Notify local authorities according to regulations.



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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 chemicals and flammable liquids.

Adequate ventilation required.

Keep material away from and open flame. No smoking.

Take precautionary measures against static discharges.

Avoid contact with eyes, inhalation of vapours.

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

When using do not eat or drink and do not smoke.

Handling temperature:

7.2 Conditions for safe storage, including any incompatibilities

Keep general measures applied for safe storage for flammable liquids.

Store in cool, well-ventilated area, in original, tightly closed containers.

Keep out of the reach of children. Keep away from food, drink.

Storage temperature: max. 35°C.

7.3 Specific end use(s)

Disinfectant liquid.

SECTION 8 Exposure controls / personal protection

Engineering control measures:

Adequate ventilation.

8.1 Control parameters:

Isopropyl alcohol: TLV (TWA) 980 mg/m³ (400 ppm)
USA [ACGIH]

Ethanol: TLV (TWA) 1920 mg/m³ (1000 ppm)

Ethyl methyl ketone: TLV (TWA) 590 mg/m³ (200 ppm)



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8.2 Exposure controls

Personal protection:

Respiratory protection: Breathing apparatus not required in case of adequate ventilation. Required, when vapours are generated (EN 14387, type A, A-P2 or ABEK-P2).

Hand protection: Protective gloves, when working with large quantities.

Eye protection: Where splashing is possible, wear protective goggles (EN 166).

Skin protection: Protective clothing when working with large quantities.

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: clear

Odour: alcohol

Change in physical state:

Pour point (DIN/ISO 3016): $< -40^{\circ}\text{C}$

Boiling point: not determined

Others:

Flash point (closed cup): typ. 20°C

Ignition point: no data

Autoignition temperature: no data

Explosive properties: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Explosion limits: lower/upper: 3.4 v/v% / % 15.0 v/v% (Ethanol, literature data)

Decomposition temperature: unknown

Oxidizing properties: no data

Vapour pressure at 20°C : no data

Density at 15°C (MSZ EN ISO 12185:1988): typ. 0.861 g/cm^3

Solubility in water at 20°C : soluble in all proportion

Thermal decomposition: no data



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n-Octanol/water partition coefficient: no data

pH (ASTM D 1287-11): typ. 6.1

9.2 Other information

Refractive index at 20°C (ISO 5661:1983): typ. 1.3675

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: No data for the product.

Components:

Ethanol:

Oral (OECD 401):	LD ₅₀ (rat):	7 060 mg/kg
Dermal (OECD 402):	LD ₅₀ (rabbit)	>20 000 mg/kg
Inhalation (OECD 403):	LC ₅₀ (rat):	20 000 ppm/10 /h

Isopropyl alcohol:

Oral (OECD 401):	LD ₅₀ (rat):	5840 mg/kg
Dermal (OECD 402):	LD ₅₀ (rabbit)	13 900 mg/kg
Inhalation (OECD 403):	LC ₅₀ (rat):	>25 mg/L / 6 h

Acute toxicity: irritation

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

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

Other information, specific effects:



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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 for the preparation.

Components:

Ethanol:

Fish toxicity (Leuciscus idus):	LC ₅₀	8140 mg/l/48 h
Daphnia toxicity (Daphnia magna):	EC ₅₀	> 7800 mg/l/48 h
Algae toxicity:	EC ₅₀	> 5000 mg/l/7 days

Isopropyl alcohol:

Fish toxicity (Pimephales promelas):	LC ₅₀	9640 mg/l/96 h
Daphnia toxicity (Daphnia magna):	EC ₅₀	10 000 mg/l/48 h
Algae toxicity (Green algae):	EC ₅₀	1800 mg/l/7 days

12.2 Persistence and degradability

Biodegradability:

Ethanol:

Readily degradable.

Isopropyl alcohol:

Readily degradable.

12.3 Bioaccumulative potential

Ethanol:

No data available.

Bioaccumulation is not expected.
(log P(o/w) ~0,32).

Isopropyl alcohol:

Bioaccumulation is not expected. (log P(o/w) <1).

12.4 Mobility

Mobility in soil:

No data.

Mobility in water:

Soluble in water.

12.5 Results of PBT and vPvB assessment

Does not contain PBT and vPvB substances.

12.6 Other adverse effects

Biological oxygen demand:

No data.

Chemical oxygen demand:

No data.



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Heavy metal content:	None.
PCT, PCB and other chlorinated hydrocarbons:	None.
Environmental effects:	May be harmful to aquatic organisms.
Water hazard class (German):	WGK 1(Classification by AwSV)

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: 07 04 04*

Other organicsolvents, washing liquids and other liquors.

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: no data

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:

14.1 UN number:

1170

14.2 UN proper shipping name:

ETHANOL SOLUTION

14.3 Transport hazard class(es):

3

Class code:

F1



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14.4 Packing group:	III
Hazard label:	3
14.5 Environmental hazards:	-
14.6 Special precautions for user:	
Kemmler Nr.:	30
Limited and excepted quantities:	5L / E1
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 or substance.
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.

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



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

Flam. Liq. 2	H225	Flash point
Eye Irrit. 2	H319	calculation method

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

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
Flam. Liq. 2	Flammable liquid Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2.
STOT SE 3	Specific target organ toxicity — single exposure Category 3

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 Labelling
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 _x	Effective Concentration x%
ErC ₅₀	EC ₅₀ 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



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IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LCx	Lethal Concentration x%
LDx	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

Revision Indicators:

Section	Subject of change	Date	Version