Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 27.01.2015 Version 1 Revision: 27.01.2015

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

1.1 Product identifier

Trade name: mibenco LIQUID RUBBER PURE

1.2 Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Application of the substance / the preparation:
mibenco liquid rubber PURE – a multifunctional, one-component rubber coating which can be easily applied as a dip, for brushing or spraying.

1.3 Details of the supplier of the safety data sheet
Manufacturer/ Supplier:
mibenco® gmbh
Am Sportplatz 5
63791 Karlstein
GERMANY

Homepage: www.mibenco.com
E-mail: info@mibenco.com
Phone: +49(0)6188-9575-20

Further information obtainable from: Geschäftsführung Phone: +49(0)6188-9575-20
1.4 Emergency telephone number: Poison Control Center Mainz +49 (0) 6131-19240 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.


GHS09 environment

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


GHS07

Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC


Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.


Xi; Irritant

R38: Irritating to skin.


F; Highly flammable

R11: Highly flammable.


N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:
The product has to be labelled according to 1272/2008/EC (GHS - Global Harmonized System; CLP - Classification, Labelling and Packaging in Europe).

Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS02 GHS07 GHS09

Signal word Danger

Hazard-determining components of labelling:
xylene
Hazard statements
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H315 Causes skin irritation.
H411 Toxic to aquatic life with long lasting effects.
Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P501	Dispose of contents/container in accordance with local/regional/national/ international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1330-20-7 xylene 55 - 65%
EINECS: 215-535-7
Xn R20/21
Xi R38
R10
Flam. Liq. 3, H226
Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315

CAS: 142-82-5 heptane 5 - <10%
EINECS: 205-563-8
Xn R65
Xi R38
F R11
N R50/53
R67
Flam. Liq. 2, H225
Asp. Tox. 1, H304
Aquatic Acute 1, H400; Aquatic Chronic 1, H410
Skin Irrit. 2, H315; STOT SE 3, H336

Additional information: For the wording of the listed risk phrases refer to section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:
Immediately rinse with water.
Remove and wash contaminated clothing.

After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:
Rinse out mouth and then drink plenty of water.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
If swallowed or in case of vomiting, danger of entering the lungs.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents:
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture
Can form explosive gas-air mixtures.
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Ensure adequate ventilation.

6.2 Environmental precautions:
Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Keep receptacles tightly sealed.
Use solvent-proof equipment.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Protect from heat.

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7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Storerooms must be well ventilated.
Keep container tightly closed.

Information about storage in one common storage facility:
Storage in the near of other chemicals or products has to be verified.

Further information about storage conditions: Protect from heat and direct sunlight.
7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
1330-20-7 xylene

WEL (Great Britain)	Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm Sk; BMGV
IOELV (EU)	Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin

142-82-5 heptane

WEL (Great Britain)	Long-term value: 2085 mg/m³, 500 ppm
IOELV (EU)	Long-term value: 2085 mg/m³, 500 ppm

DNELs
Long time exposition - inhalation - local effects: 77 mg/m³
Substace: xylene
Source: European Chemicals Agency
None
Not determined
Ingredients with biological limit values:
1330-20-7 xylene

BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A / P3

Protection of hands:
Wear gloves for the protection against chemical hazards according to EN 374.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

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Material of gloves
Fluorocarbon rubber (Viton)
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
Fluorocarbon rubber (Viton): Thickness: about 0.4 mm, breakthrough time > 480 h
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed goggles

Body protection: Protective work clothing
Limitation and supervision of exposure into the environment
See section 6 and 12 for further information.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form:	Fluid
Colour:	Different according to colouring
Odour:	Solvent-like
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	79 - 141 °C
Flash point:	- 7 °C (heptane)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	220 °C (heptane)
Decomposition temperature:	Not determined.
Self-igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	0.8 Vol % (heptane)
Upper:	6.7 Vol % (heptane)
Vapour pressure at 20 °C:	47 mbar (heptane)
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	ca. 0.6 mm²/s (heptane)
VOC (EC)	690 - 710 g/L
Solids content:	ca. 30 %

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9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: No dangerous decomposition products known.

Additional information: In case of thermal decomposition irritating gases may occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity
1330-20-7 xylene
Oral LD50 3500 mg/kg (rat)

Acute dermal toxicity
1330-20-7 xylene
Dermal LD50 ≥ 4350 mg/kg (rabbit)

Acute inhalative toxicity
1330-20-7 xylene
Inhalative LC50 > 29.1 mg/L (rat) (4h)

Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.

Sensitisation: No sensitising effects known.

Other information (about experimental toxicology):
Solvent vapors can lead to health problems above the occupational exposure limit, such as irritation of the mucous membranes and respiratory system, liver, kidneys and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscle weakness, drowsiness and in extreme cases, unconsciousness. Solvents may cause these effects by skin absorption. Prolonged or repeated contact with product may cause degreasing of the skin and can cause non-allergic contact damage and / or absorption. Splashes may cause irritation and reversible damage of the eyes.

Additional toxicological information:
The classification was carried out with calculation methods for preparations according to Regulation (EC) 1272/2008.
No toxicological data available.

SECTION 12: Ecological information

12.1 Toxicity This product may have a harmful effect on the aquatic environment.

Fish toxicity
142-82-5 heptane
LC50 375 mg/L (fish)
1330-20-7 xylene
LC50 3.3 mg/L (fish) (96h)

Daphnia toxicity
1330-20-7 xylene
LC50 190 mg/L (Daphnia Magna) (96h)

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12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.

Ecotoxical effects:

Remark: Toxic for fish

Additional ecological information:

General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation:
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN-Number	
ADR, IMDG, IATA	UN1139
14.2 UN proper shipping name	
ADR	COATING SOLUTION, ENVIRONMENTALLY HAZARDOUS, special provision 640D
IMDG	COATING SOLUTION, mixture, MARINE POLLUTANT
IATA	COATING SOLUTION, mixture
14.3 Transport hazard class(es)	

ADR, IMDG

Class	3 Flammable liquids.
Label	3

IATA

Class	3 Flammable liquids.
Label	3
14.4 Packing group	
ADR, IMDG, IATA	II
14.5 Environmental hazards:	Product contains environmentally hazardous substances: heptane
Marine pollutant:	Yes Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)

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14.6 Special precautions for user Warning: Flammable liquids.
Danger code (Kemler): 33
EMS Number: F-E,S-E
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

ADR
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
Transport category 2
Tunnel restriction code D/E

IMDG
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations:

Information about limitation of use: No further information.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

R10 Flammable.
R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R38 Irritating to skin.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Sources
GESTIS: Data base see www.dguv.de
Manufacturer's information.