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

- · 1.1 Product identifier
- · Trade name: Formaldehyd 37 %
- · Article number: 36
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Disinfectant

Electroplating material

Preservative

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

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



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1B H350 May cause cancer.

STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1B H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms

(Contd. of page 1)







GHS05 GHS06

· Signal word Danger

· Hazard statements

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects.

H350 May cause cancer.

Causes damage to the central nervous system and the visual organs. H370

H335 May cause respiratory irritation.

· Precautionary statements

If medical advice is needed, have product container or label at hand. P101

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

IF SWALLOWED: Immediately call a POISON CENTER/doctor. P301+P310

Specific treatment (see on this label). P321

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Take off immediately all contaminated clothing and wash it before reuse. P361+P364

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

· Results of PBT and vPvB assessment

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components: CAS: 50-00-0 formaldehyde 37.0% EINECS: 200-001-8 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; 🔈 Muta. 2, H341; Carc. 1B, H350; STOT SE 1, H370; 🕎 Skin Corr. Index number: 605-001-00-5 1B, H314; Eye Dam. 1, H318; 介 Skin Sens. 1, H317 Specific concentration limits: Skin Corr. 1B; H314: C≥25 % Skin Irrit. 2; H315: $5\% \le C < 25\%$ Eye Irrit. 2; H319: $5\% \le C < 25\%$ Skin Sens. 1; H317: C ≥ 0.2 % STOT SE 3; H335: C ≥ 5 %

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12.0%

CAS: 67-56-1 EINECS: 200-659-6

Index number: 603-001-00-X

methanol

🏵 Flam. Lig. 2, H225; 🧇 Acute Tox. 3, H301; Acute Tox. 3, H311;

Àcute Tox. 3, H331; 🗞 ŠTOT SE 1, H370 Specific concentration limits: STOT SE 1; H370: $C \ge 10 \%$

STOT SE 2; H371: 3 % ≤ C < 10 %

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

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

- 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 No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fire with alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

In case of fire hazardous combustion gases or vapors possible.

- · 5.3 Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Keep container tightly closed.
- · Information about storage in one common storage facility: Not mandatory.
- Further information about storage conditions: Store in the original container.
- · Storage class: 6.1 D
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with	limit values that	reauire monitoring	at the workplace:

50-00-0 formaldehyde

BOELV Short-term value: 0.74 mg/m³, 0.6 ppm

Long-term value: 0.37 (0.62)* mg/m³, 0.3 (0.5)* ppm Skin sens;*health/funeral/embalming till 11/7/24

67-56-1 methanol

IOELV Long-term value: 260 mg/m³, 200 ppm

Skin

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · 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.

· Hand protection



Protective gloves

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

· Material of gloves

Nitrile rubber, NBR

Chloroprene rubber, CR

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

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye/face protection

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Tightly sealed goggles

· Body protection: Use protective suit.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

Colourless · Colour: Characteristic · Odour: · Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

95 °C

· Lower and upper explosion limit

5.5 Vol % · Lower: 73.0 Vol % · Upper: 66 °C · Flash point: 455 °C · Auto-ignition temperature: · pH at 20 °C

·Solubility

· water: Fully miscible.

· Vapour pressure at 40 °C: 5.2 hPa

· Density and/or relative density

Density at 20 °C: $1.09 \, g/cm^3$

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

· Ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Information with regard to physical hazard classes · Explosives Void · Flammable gases Void · Aerosols Void Void · Oxidising gases · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void Void · Pyrophoric solids · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable Void gases in contact with water

Void · Oxidising liquids

Void · Oxidising solids · Organic peroxides Void · Corrosive to metals Void

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· Desensitised explosives

Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions Danger of polymerisation.
- 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Strong bases

Strong oxidizing agents

Acids.

· 10.6 Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated become.

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity

Toxic if swallowed, in contact with skin or if inhaled.

· LD/LC50 values relevant for classification:		
50-00-0 fo	rmaldehya	le
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4h	3 mg/l (ATE)
67-56-1 m	ethanol	
Dermal	LD50	15,800 mg/kg (rabbit)
Inhalative	LC50/4h	85 mg/l (rat)

· Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

· Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Suspected of causing genetic defects.

· Carcinogenicity

May cause cancer.

- · Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure

Causes damage to the central nervous system and the visual organs.

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

– EU

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SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

LC50/48 h: 140 mg/l (Lepomis macrochirus)

EC50/24 h: 42 mg/l (Daphnia magna)

- · 12.2 Persistence and degradability biodegradable
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14:	Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN2209	
· 14.2 UN proper shipping name · ADR · IMDG, IATA	2209 FORMALDEHYDE SOLUTION FORMALDEHYDE SOLUTION	

- · 14.3 Transport hazard class(es)
- · ADR, IMDG, IATA



3	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user · Hazard identification number (Kemler code):	Warning: Corrosive substances. 80

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	(Contd. of page
· Stowage Category	A
· 14.7 Maritime transport in bulk according	to IMO
instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2209 FORMALDEHYDE SOLUTION, 8, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category H2 ACUTE TOXIC
- \cdot Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 28, 69, 72
- · 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.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H370 Causes damage to organs.

H371 May cause damage to organs.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · 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

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ADR: Accord relatif au transport international 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity - Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1B: Skin sensitisation – Category 1B

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1B: Carcinogenicity - Category 1B

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

FII