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

· Product identifier

· Trade name: Hydrogen peroxide 35 %

· Article number: 6007

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

No further relevant information available.

- · Application of the substance / the mixture oxidizing agent
- 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

Emergency telephone number:

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

2 Hazards identification

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



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

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

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

· Hazard pictograms





GHS05

GHS07

- · Signal word Danger
- · Hazard-determining components of labelling:

hydrogen peroxide solution

· Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

· Precautionary statements

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

P102 Keep out of reach of children.

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P103 Read carefully and follow all instructions.

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

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P330 Rinse mouth.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

regulations.

· Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher.

· Results of PBT and vPvB assessment

PRT:

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).

3 Composition/information on ingredients

- · Mixtures
- · Description:

aqueous solution content: 34 - 36%

Dangerous components:

CAS: 7722-84-1 hydrogen peroxide solution

EINECS: 231-765-0
Index number: 008-003-00-9

hydrogen peroxide solution

Ox. Liq. 1, H271; ♦ Skin C
Acute Tox. 4, H332; STOT SE 3

© Ox. Liq. 1, H271; O Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412

Specific concentration limits: Ox. Liq. 1; H271: $C \ge 70 \%$ Ox. Liq. 2; H272: $50 \% \le C < 70 \%$ Skin Corr. 1A; H314: $C \ge 70 \%$

Skin Corr. 1B; H314: $50 \% \le C < 70 \%$ Skin Irrit. 2; H315: $35 \% \le C < 50 \%$ Eye Dam. 1; H318: $C \ge 8 \%$ Eye Irrit. 2; H319: $5 \% \le C < 8 \%$

STOT SE 3; C ≥ *35* %

· Additional information:

For the wording of the listed hazard phrases refer to section 16.

CAS No.: 7722-84-1 hydrogen peroxide

REACH registration number: 01-2119485845-22

4 First aid measures

- Description of first aid measures
- · General information: Take affected persons out into the fresh air.
- · After inhalation: Supply fresh air or oxygen; call for doctor.
- · After skin contact:

If skin irritation continues, consult a doctor.

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:

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

(Contd. on page 3)

35.0%

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(Contd. of page 2)

- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents:

Water with full jet

Organic compounds.

· Special hazards arising from the substance or mixture

In the event of fire in the vicinity, risk of decomposition with release of oxygen. Risk of overpressure and bursting if decomposed in closed containers and pipelines. The release of oxygen can have a fire-promoting effect.

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Contain spilled material, absorb with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal in accordance with local/national regulations.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 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.

7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with eyes and skin.

Do not breathe vapors and mist.

· Information about fire - and explosion protection:

Heating leads to an increase in pressure and a risk of bursting.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Use only containers specifically approved for hydrogen peroxide.

Information about storage in one common storage facility:

Store away from reducing agents.

Do not store together with alkalis (caustic solutions).

Store away from flammable substances.

Do not store together with metal salts (risk of decomposition).

- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class: 5.1 B

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· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

The usual precautionary measures are to be adhered to when handling chemicals.

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.

· 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

Butyl rubber, BR

Natural rubber, NR

Nitrile rubber, NBR

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.

· Eye/face protection



Tightly sealed goggles

· Body protection: Acid resistant protective clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information

· Colour: Colourless
· Odour: Characteristic

· *Odour threshold:* Not determined.

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22.00
-33 °C
108 °C
Not applicable.
Not determined.
Not determined.
not applicable
Not determined.
< 3.5
Not determined.
1.12 mPas
Fully miscible.
Not determined.
31.99 hPa
1.132 g/cm^3
Not determined.
Not determined.
Fluid
nd
Product is not selfigniting.
Product does not present an explosion hazard.
1 1
Not determined.

· Information with regard to physical hazard o	classes
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flamm	able
gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
o	T7 · 1

10 Stability and reactivity

· Desensitised explosives

Organic peroxides Corrosive to metals

· Reactivity

Product is an oxidizing agent and reactive. Risk of decomposition if exposed to heat/heat, contamination or contact with incompatible materials.

Void

Void

Void

(Contd. on page 6)

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Trade name: Hydrogen peroxide 35 %

(Contd. of page 5)

- · Chemical stability
- · Thermal decomposition / conditions to be avoided: Decomposes when heated.
- · Possibility of hazardous reactions

A dangerous polymerization does not take place.

Impurities, decomposition catalysts, incompatible substances, combustible substances can lead to self-accelerated, exothermic decomposition with the development of oxygen if they come into contact with the product. Risk of overpressure and risk of bursting when decomposing in closed containers and pipelines. Release of oxygen can be oxidizing

- · Conditions to avoid Sun exposure, warmth, exposure to heat
- · Incompatible materials:

Reducing agent

metals

Bases.

flammable substances

11 Toxicological information

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

Harmful if swallowed or if inhaled.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative LC50/4h 31.4 mg/l

7722-84-1 hydrogen peroxide solution

Inhalative LC50/4h 11 mg/l (ATE)

· Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

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.
- · Additional toxicological information:

The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 at levels of 0.1% or more have endocrine disrupting properties.

- · Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

Fish toxicity:

LC50/96 h: 16.4 mg/l (Pimephales promelas)

Daphnia toxicity:

EC50/24 h: 2.4 mg/l (Daphnia pulex)

Bacterial Toxicity:

EC50/0.5 h: 466 mg/l (activated sludge)

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(Contd. of page 6)

- · Persistence and degradability Easily biodegradable
- · Bioaccumulative potential Does not bioaccumulate. The product decomposes quickly in the soil or in water.
- · Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · PBT: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · **vPvB**: This substance is not considered to be very persistent nor very bioaccumulative (vPvB).
- Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:

· Label

- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

Transport information	
UN number or ID number ADR, IMDG, IATA	UN2014
UN proper shipping name ADR IMDG, IATA	2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Transport hazard class(es)	
ADR	
55 B	
Class	5.1 Oxidising substances.
Label	5.1+8
IMDG	
51 6	
Class	5.1 Oxidising substances.
Label	5.1/8
IATA	
Class	5.1 Oxidising substances.

5.1 (8)

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	(Contd. of pag
Packing group ADR, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Oxidising substances.
Hazard identification number (Kemle	e e
EMS Number:	F-H,S-Q
Stowage Category	D
Stowage Code	SW1 Protected from sources of heat.
Segregation Code	SG16 Stow "separated from" class 4.1
	SG59 Stow "separated from" SGG14-permanganates
	SG72 See 7.2.6.3.2.
Maritime transport in bulk according	e to IMO
instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	IL
Excepted quantities (\widetilde{EQ})	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTIO 5.1 (8), II

15 Regulatory information

- Directive 2004/42/EC
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I

The material is not included.

None of the ingredients is listed.

- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

7722-84-1 hydrogen peroxide solution

Limit value: >12-≤35 % 35,0%

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has been carried out.

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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

H271 May cause fire or explosion; strong oxidiser.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· 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

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

Ox. Liq. 1: Oxidizing liquids – Category 1

Acute Tox. 4: Acute toxicity - Category 4

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

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

EU