

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 5/16/2023 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Trade name : Hydrogen peroxide 30 weight % solution a.r.

EC Index-No. : 008-003-00-9
EC-No. : 231-765-0
CAS-No. : 7722-84-1
REACH registration No. : 01-2119485845-22

Product code : CL00.2308
Type of product : Solution, Group

Formula : H2O2

Synonyms : dihydrogen dioxide, 20%≤conc<35%, aqueous solutions / hydrogen dioxide,

20%≤conc<35%, aqueous solutions / hydrogen peroxide (H2-O2) / hydroperoxide, 20%≤conc<35%, aqueous solutions / oxygenised water, 20%≤conc<35%, aqueous solutions / peroxide of hydrogen, 20%≤conc<35%, aqueous solutions / peroxide,

20%≤conc<35%, aqueous solutions

BIG No : 40868

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemical

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Chem-Lab nv Industriezone 'De arend 2' Zedelgem – Belgium Belgium

T +32 50 288320

info@chem-lab.be - https://www.chem-lab.be

1.4. Emergency telephone number

Emergency number : +32 50 28 83 20

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidising Liquids, Category 1 H271
Acute toxicity (oral), Category 4 H302
Skin corrosion/irritation, Category 1, Sub-Category 1A H314
Serious eye damage/eye irritation, Category 1 H318
Specific target organ toxicity – Single exposure, Category 3, Respiratory H335

tract irritation

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H271 - May cause fire or explosion; strong oxidiser.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage. H335 - May cause respiratory irritation.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking.

P310 - Immediately call a POISON CENTER, a doctor.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

2.3. Other hazards

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation First-aid measures after skin contact

: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

: Rinse with water. Do not apply (chemical) neutralizing agents without medical advice. Take victim to a doctor if irritation persists.

First-aid measures after eye contact

: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply (chemical) neutralizing agents without medical advice.

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First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not

induce vomiting. Call Poison Information Centre (www.big.be/antigif.html). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to

hospital

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing.
Symptoms/effects after skin contact : ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin.
Symptoms/effects after eye contact : Corrosion of the eye tissue. Inflammation/damage of the eye tissue.

Symptoms/effects after ingestion : Vomiting. Abdominal pain.

Chronic symptoms : No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water. Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher. Quantities of

water.

Unsuitable extinguishing media : Foam. Foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD: Non combustible. INDIRECT FIRE HAZARD: Promotes

combustion. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity

Hazard".

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors

and windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Cool from behind

cover/unmanned monitors. Do not move the load if exposed to heat. After cooling:

persistant risk of physical explosion.

Protection during firefighting : Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Safety glasses (EN 166). Protective clothing (EN 14605 or EN 13034).

: Mark the danger area. No naked flames. Wash contaminated clothes. In case of reactivity

hazard: consider evacuation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent spreading in sewers.

Emergency procedures

6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the

supply. Dam up the liquid spill.

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Methods for cleaning up

: Take up liquid spill into inert absorbent material, e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep container tightly closed.

Hygiene measures

: Observe normal hygiene standards.

7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources

: KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage

: KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. reducing agents. (strong) acids. (strong) bases. oils-fats. metals. cellulosic materials. organic

materials.

Storage area

: Store in a cool area. Keep out of direct sunlight. Store in a dark area. Keep container in a well-ventilated place. Provide for a tub to collect spills. Keep only in the original container. Meet the legal requirements.

Special rules on packaging

: SPECIAL REQUIREMENTS: closing. with pressure relief valve. clean. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials

SUITABLE MATERIAL: stainless steel. aluminium. polyethylene. glass. stoneware/porcelain. MATERIAL TO AVOID: monel steel. lead. iron. copper. zinc. nickel. brass. bronze.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

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8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

Hand protection:

Protective gloves against chemicals (EN 374)

Other skin protection

Materials for protective clothing:

Excellent resistance: Butyl rubber. Natural rubber. Nitrile rubber. Polyethylene. Viton. Good resistance: Polyethylene/ethylenevinylalcohol. Polyvinylchloride (PVC). Less resistance: neoprene (chloroprene rubber). Poor resistance: Polyvinylalcohol (PVA). natural fibres

8.2.2.3. Respiratory protection

Respiratory protection:

Respiratory protection not required in normal conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour Colourless. Appearance : Liquid. : 34.01 g/mol Molecular mass : Almost odourless. Odour Odour threshold Not available : -26 °C Melting point : Not available Freezing point : 107 °C Boiling point Flammability : Not available **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : Not available рΗ : 2.02 (50 %, 21 °C)

Viscosity, kinematic : 1.125 mm²/s

Viscosity, dynamic : 1.249 mPa.s (20 °C, Pure substance, 100 %)
Solubility : Soluble in water. Soluble in ethanol. Soluble in ether.

Water: complete

Partition coefficient n-octanol/water (Log Kow) : Not available

Vapour pressure : 2.535 hPa (25 °C, Calculated, Anhydrous form)

Vapour pressure at 50°C : Not available

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Density : 1.11 g/ml

Relative density : 1.71 (20 °C, Anhydrous form, Calculated)

Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Minimum ignition energy : Not applicable

VOC content : Not applicable (inorganic)

Other properties : Clear, Physical properties depending on the concentration

SECTION 10: Stability and reactivity

10.1. Reactivity

Decomposes slowly on exposure to light: oxidation which increases fire hazard. This reaction is accelerated on exposure to impurities and on exposure to temperature rise. Reacts with combustible materials, with organic material and with (strong) reducers: (increased) risk of fire/explosion.

10.2. Chemical stability

Unstable on exposure to heat. Unstable on exposure to light.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

ATE CLP (oral)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Hydrogen peroxide 30 weight % solution a.r. (7722-84-1)

Skin corrosion/irritation : Causes severe skin burns.

pH: 2.02 (50 %, 21 °C)

500 mg/kg bodyweight

Serious eye damage/irritation : Causes serious eye damage.

pH: 2.02 (50 %, 21 °C)

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

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Hydrogen peroxide 30 weight % solution a.r. (7722-84-1)	
Viscosity, kinematic	1.125 mm²/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms

: Causes serious eye damage

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Regulation (EC)

No 1272/2008.

: None of the known components is included in the list of substances which may contribute to Ecology - air

the greenhouse effect (IPCC). None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous

for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Toxic to crustacea. Harmful to fishes. Toxic to algae. pH shift. : Not classified

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term

(chronic)

Not rapidly degradable

: Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Hydrogen peroxide 30 weight % solution a.r. (7722-84-1)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Hydrogen peroxide 30 weight % solution a.r. (7722-84-1)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

Hydrogen peroxide 30 weight % solution a.r. (7722-84-1)	
Surface tension	80.4 mN/m (20 °C, Pure substance, 100 %)
Ecology - soil	No (test)data on mobility of the component(s) available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

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Additional information

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

: Remove to an authorized plant for the destruction, neutralization and elimination of hazardous waste. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances 16 03 03* - inorganic wastes containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
UN 2014	UN 2014	UN 2014	UN 2014	UN 2014
14.2. UN proper shipping	g name			
hydrogen peroxide, aqueous solution	hydrogen peroxide, aqueous solution	hydrogen peroxide, aqueous solution	hydrogen peroxide, aqueous solution	hydrogen peroxide, aqueous solution
Transport document descri	ption			
UN 2014 hydrogen peroxide, aqueous solution, 5.1 (8), II, (E)	UN 2014 hydrogen peroxide, aqueous solution, 5.1 (8), II	UN 2014 hydrogen peroxide, aqueous solution, 5.1 (8), II	UN 2014 hydrogen peroxide, aqueous solution, 5.1 (8), II	UN 2014 hydrogen peroxide, aqueous solution 5.1 (8), II
14.3. Transport hazard c	lass(es)			
5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)
5.1	5.1	5.1	5.1	5.1
14.4. Packing group				
II	II	II	II	II
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport

Transport regulations (ADR) : Subject to the provisions

Classification code (ADR) : OC1 Hazard identification number (Kemler No.) : 58

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Tunnel restriction code (ADR) : E EAC code : 2P

Transport by sea

Orange plates

Transport regulations (IMDG) : Subject to the provisions

EmS-No. (Fire) : F-H EmS-No. (Spillage) : S-Q

Air transport

Transport regulations (IATA) : Subject to the provisions

Inland waterway transport

Classification code (ADN) : OC1
Carriage permitted (ADN) : T

Rail transport

Transport regulations (RID) : Subject to the provisions

Classification code (RID) : OC1

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : Not applicable (inorganic)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG).

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Storage class (LGK, TRGS 510) LGK 5.1A - Highly oxidising substances.

Joint storage table

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for : LGK 1, LGK 2A, LGK 2B, LGK 3, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1C, LGK

5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 6.2, LGK 7, LGK 8A, LGK 8B, LGK

10, LGK 11, LGK 10-13.

Joint storage permitted for : LGK 5.1A, LGK 5.1B, LGK 12, LGK 13.

Chemicals Prohibition Ordinance (ChemVerbotsV) This product is subject to ChemVerbotsV Annex 2 Entry 2. The following requirement must

be observed: Basic requirements for the implementation of the submission (according to § 8

paragraph 1, 3 and 4).

Hazardous Incident Ordinance (12. BlmSchV) : Is not subject of the Hazardous Incident Ordinance (12. BlmSchV)

Netherlands

ABM category : B(2) - toxic for aquatic organisms

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 5 - Oxidizing materials

Chemicals Ordinance (SR 813.11) : Group 2

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H271	May cause fire or explosion; strong oxidiser.	
H272	May intensify fire; oxidiser.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H412	Harmful to aquatic life with long lasting effects.	
Ox. Liq. 1	Oxidising Liquids, Category 1	
Ox. Liq. 2	Oxidising Liquids, Category 2	

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Full text of H- and EUH-statements:		
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.