

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

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

1.1. Product identifier

Product form : Substance

Trade name : HYDROGEN PEROXIDE Chemical name : hydrogen peroxide solution... %

EC Index-No. : 008-003-00-9 : 231-765-0 FC-No CAS-No. : 7722-84-1 Product group : Raw material

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

No additional information available

1.4. Emergency telephone number

No additional information available

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

H302 Acute toxicity (oral), Category 4 H332 Acute toxicity (inhal.), Category 4 Acute toxicity (inhalation:vapour) Category 4 H332 Skin corrosion/irritation, Category 1, Sub-Category 1A H314

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

Specific concentration limits:

 $(5 \le C < 8)$ Eye Irrit. 2; H319 $(8 \le C < 50)$ Eye Dam. 1; H318 Skin Irrit. 2; H315 $(35 \le C < 50)$ $(35 \le C < 100)$ STOT SE 3; H335 $(50 \le C < 70)$ Ox. Liq. 2; H272 Skin Corr. 1B; H314 $(50 \le C < 70)$ $(70 \le C < 100)$ Ox. Liq. 1; H271 $(70 \le C < 100)$ Skin Corr. 1A; H314

Adverse physicochemical, human health and environmental effects

May cause fire or explosion; strong oxidiser. Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage

2.2. Label elements

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

Hazard pictograms (CLP)





GHS03

: Danger

GHS05

H271

GHS07

Signal word (CLP)



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

Hazard statements (CLP)

H271 - May cause fire or explosion; strong oxidiser.

H302+H332 - Harmful if swallowed or if inhaled.

H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP)

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

P220 - Keep away from clothing and other combustible materials.

P221 - Take any precaution to avoid mixing with combustibles.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

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

P283 - Wear fire/flame resistant/retardant clothing.

P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

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

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

Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P306+P360 - IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P310 - Immediately call a POISON CENTER or doctor.

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P370+P378 - In case of fire: Use media other than water to extinguish.

P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
,,,,	(CAS-No.) 7722-84-1 (EC-No.) 231-765-0 (EC Index-No.) 008-003-00-9	50 / 35 / 3

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Call a physician immediately.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact

: Rinse skin with water/shower. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion

: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact

: Burns.

Symptoms/effects after eye contact

: Serious damage to eyes.



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE %50

Symptoms/effects after ingestion

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media Suitable extinguishing media

: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

: May cause fire or explosion; strong oxidiser. Fire hazard

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk

of explosion.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with **Emergency procedures**

skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Precautions for safe handling

smoking. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this Hygiene measures

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

: Store locked up. Store in a well-ventilated place. Keep cool. Storage conditions

Incompatible materials : combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

Eye protection:

Safety glasses

Skin and body protection:

Wear fire/flame resistant/retardant clothing.

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):







Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid.

Colour : No data available Odour : No data available : No data available Odour threshold : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available

: 108 °C Boiling point

: No data available Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability : Not applicable : No data available Vapour pressure : No data available Relative vapour density at 20°C Relative density : No data available Density : 1.13 g/ml

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties : No data available : No data available Oxidising properties : No data available Explosive limits

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

May cause fire or explosion; strong oxidiser.

10.2. Chemical stability

Stable under normal conditions



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Combustible materials.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed. Acute toxicity (dermal) Not classified

Acute toxicity (inhalation) : Harmful if inhaled. Inhalation:vapour: Harmful if inhaled.

Skin corrosion/irritation : Causes severe skin burns.

Serious eye damage/irritation : Assumed to cause serious eye damage

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Not classified Carcinogenicity Reproductive toxicity : Not classified STOT-single exposure Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

AD	₹	IMDG	IATA	ADN	RID
14.1. UN number					
UN 2)15	UN 2015	UN 2015	UN 2015	UN 2015



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

14.2. UN proper shipping name				
HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED	HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED	Hydrogen peroxide, aqueous solution, stabilized	HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED	HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED
Transport document descri	ption			
UN 2015 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED, 5.1 (8), I, (B/E)	UN 2015 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED, 5.1 (8), I	UN 2015 Hydrogen peroxide, aqueous solution, stabilized, 5.1 (8)	UN 2015 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED, 5.1 (8), I	UN 2015 HYDROGEN PEROXIDE, AQUEOUS SOLUTION, STABILIZED, 5.1 (8), I
14.3. Transport hazard class(es)				
5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)
14.4. Packing group				
I	I	Not applicable	I	I
14.5. Environmental hazards				
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
No supplementary information available				

14.6. Special precautions for user

Overland transport

: OC1 Classification code (ADR) Special provisions (ADR) : 6400 Limited quantities (ADR) 0 Excepted quantities (ADR) : E0 Packing instructions (ADR) : P501 : MP2 Mixed packing provisions (ADR) Portable tank and bulk container instructions : T9 (ADR)

Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : L4BV(+)

: TU3, TU28, TC2, TE7, TE8, TE9, TT1 Tank special provisions (ADR)

Vehicle for tank carriage : OX Transport category (ADR) 1 Special provisions for carriage - Packages (ADR) : V5 Special provisions for carriage - Loading, : CV24 unloading and handling (ADR)

Special provisions for carriage - Operation (ADR) : S20 559 Hazard identification number (Kemler No.)

Orange plates

: TP2, TP6, TP24

Tunnel restriction code (ADR) : B/E

Transport by sea

0 Limited quantities (IMDG) Excepted quantities (IMDG) : E0 Packing instructions (IMDG) : P501 Tank instructions (IMDG) : T9



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

: TP2, TP6, TP24 Tank special provisions (IMDG)

EmS-No. (Fire) : F-H EmS-No. (Spillage) : S-Q Stowage category (IMDG) · D Stowage and handling (IMDG) : SW1

Segregation (IMDG) : SG16. SG59

Properties and observations (IMDG) : Colourless liquid. Slowly decomposes, evolving oxygen; the rate of decomposition

increases in contact with metals, except aluminium. Decomposes vigorously in contact with permanganates. When involved in a fire, mixtures with combustible material may be explosive. Causes burns to skin, eyes and mucous membranes. Even though stabilized,

these solutions may evolve oxygen.

Air transport

PCA Limited quantities (IATA) : Forbidden PCA limited quantity max net quantity (IATA) · Forbidden PCA packing instructions (IATA) : Forbidden PCA max net quantity (IATA) : Forbidden : Forbidden CAO packing instructions (IATA) CAO max net quantity (IATA) : Forbidden

ERG code (IATA) : 5C

Inland waterway transport

: OC1 Classification code (ADN) Special provisions (ADN) : 6400 Limited quantities (ADN) 0 : E0 Excepted quantities (ADN) Equipment required (ADN) : PP, EP Number of blue cones/lights (ADN) 0

Rail transport

Classification code (RID) · OC1 : 6400 Special provisions (RID) 0 Limited quantities (RID) Excepted quantities (RID) : E0 Packing instructions (RID) : P501 Mixed packing provisions (RID) · MP2 Portable tank and bulk container instructions (RID) : T9

Portable tank and bulk container special provisions : TP2, TP6, TP24

(RID)

Tank codes for RID tanks (RID) : L4BV(+)

Special provisions for RID tanks (RID) : TU3, TU28, TC2, TE7, TE8, TE9, TE16, TT1

Transport category (RID) 1 Special provisions for carriage - Packages (RID) : W5 Special provisions for carriage - Loading, : CW24 unloading and handling (RID)

Hazard identification number (RID) 559

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

Not listed on REACH Annex XVII Not listed on the REACH Candidate List



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 13/07/2016 Revision date: 21/02/2024

Version: 4.0

HYDROGEN PEROXIDE

Not listed on REACH Annex XIV (Authorisation List) Not listed on the PIC list (Regulation EU 649/2012) Not listed on the POP list (Regulation EU 2019/1021)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:				
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4			
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4			
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4			
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.			
H332	Harmful if inhaled.			
H335	May cause respiratory irritation.			
Ox. Liq. 1	Oxidising Liquids, Category 1			
Ox. Liq. 2	Oxidising Liquids, Category 2			
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			

SDS EU (BILIM)

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.