

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Hydrogen peroxide solution, 35%  
Type of product : Solution  
Formula : H2O2

#### 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 : Bleaching agent  
Disinfectant  
Chemical raw material  
Laboratory chemicals  
Waste water treatment  
Electronics  
Metal working fluids  
Textile industry  
Oxidising agents  
Odour agents

##### 1.2.2. Uses advised against

No additional information available.

#### 1.3. Details of the supplier of the safety data sheet

ISOLAB Laborgeräte GmbH  
Am Dillhof 2 - 63863 Eschau / GERMANY  
Tel: + 49 93 74 / 978 55-0  
Fax: +49 93 74 / 978 55-29  
[prodsafe@isolab.de](mailto:prodsafe@isolab.de)

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Remark
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 30 19240	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179

Acute Tox. 4 (Oral) H302  
Eye Dam. 1 H318  
Skin Irrit. 2 H315  
STOT SE 3 H335

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available.

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H302 - Harmful if swallowed.  
H315 - Causes skin irritation  
H318 - Causes serious eye damage.  
H335 - May cause respiratory irritation.

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Precautionary statements (CLP) : P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P313 - Get medical advice/ attention.

### 2.3. Other hazards

No additional information available.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP] with its amendment Regulation (EU) 2016/1179
hydrogen peroxide solution ... %	(CAS-No.) 7722-84-1 (EC-No.) 231-765-0 (EC Index-No.) 008-003-00-9	35	Ox. Liq. 1, H271 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
hydrogen peroxide solution ... %	(CAS-No.) 7722-84-1 (EC-No.) 231-765-0 (EC Index-No.) 008-003-00-9	( 5 =<C < 8) Eye Irrit. 2, H319 ( 8 =<C < 50) Eye Dam. 1, H318 ( 35 =<C < 50) Skin Irrit. 2, H315 ( C >= 35) STOT SE 3, H335 ( 50 =<C < 70) Ox. Liq. 2, H272 ( 50 =<C < 70) Skin Corr. 1B, H314 ( C >= 70) Ox. Liq. 1, H271 ( C >= 70) Skin Corr. 1A, H314

Full text of H-statements: see section 16

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

First-aid measures after skin contact : Wash immediately with lots of water. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists. Take victim to a doctor/medical service 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 neutralizing agents. Take victim to an ophthalmologist. Consult a doctor/medical service.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital. Do not give chemical antidote.

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

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. ON CONTINUOUS EXPOSURE/CONTACT: Risk of lung oedema. Respiratory difficulties.

Symptoms/effects after skin contact : Tingling/irritation of the skin.

Symptoms/effects after eye contact : Corrosion of the eye tissue. Inflammation/damage of the eye tissue.

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Symptoms/effects after ingestion : Gastrointestinal complaints.  
Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry/sore throat. Irritation of the eye tissue.

### 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 : Adapt extinguishing media to the environment for surrounding fires.

### 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: persistent risk of physical explosion.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Protective clothing.

Emergency procedures : Mark the danger area. No naked flames. Keep containers closed. 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.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill.

Methods for cleaning up : Take up liquid spill into a non combustible material e.g.: sand. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. Damaged/cooled tanks must be emptied. 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. Handle and open the container with care. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain.

Hygiene measures : Observe normal hygiene standards. Keep container tightly closed.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : < 60 °C

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. highly flammable materials. metals. organic materials. alcohols.

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Storage area	: Store in a cool area. Keep out of direct sunlight. Store in a dark area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Provide for a tub to collect spills. Under a shelter/in the open. Keep only in the original container. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. nonhermetical. 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. iron. copper. zinc. lead. nickel. brass. bronze.

### 7.3. Specific end use(s)

No additional information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Hydrogen peroxide solution, 35%		
EU	Local name	Hydrogen peroxide
EU	Notes	(Ongoing)
EU	Regulatory reference	SCOEL Recommendations
Austria	Local name	Wasserstoffperoxid
Austria	MAK (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Austria	MAK (ppm)	1 ppm
Austria	MAK Short time value (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
Austria	MAK Short time value (ppm)	2 ppm
Austria	Regulatory reference	BGBI. II Nr. 186/2015
Belgium	Local name	Hydrogène (peroxyde d') # Waterstofperoxide
Belgium	Limit value (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Belgium	Limit value (ppm)	1 ppm
Belgium	Regulatory reference	Koninklijk besluit/Arrêté royal 11/03/2002
Bulgaria	Local name	Водороден пероксид
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Bulgaria	Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа
Croatia	Local name	Vodikov peroksid
Croatia	GVI (granična vrijednost izloženosti) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (ppm)	1 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	2 ppm
Croatia	Naznake (HR)	O (oksidirajuće); C (nagrizajuće)
Croatia	Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN, br. 75/13)
Czech Republic	Local name	Peroxid vodíku
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (PEL) (ppm)	0.72 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Czech Republic	Expoziční limity (NPK-P) (ppm)	1.44 ppm
Czech Republic	Remark (CZ)	I (dráždí sliznice (oči, dýchací cesty) resp. kůži)
Czech Republic	Regulatory reference	Nařízení vlády č. 361/2007 Sb. (zapracovány změny č. 93/2012 Sb., 9/2013 Sb.)
Denmark	Local name	Hydrogenperoxid (Brintoverilte)
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (ppm)	1 ppm
Denmark	Regulatory reference	BEK nr 986 af 11/10/2012
Estonia	Local name	Vesinikperoksiid

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Hydrogen peroxide solution, 35%		
Estonia	OEL TWA (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Estonia	OEL TWA (ppm)	1 ppm
Estonia	OEL Ceiling (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Estonia	OEL Ceiling (ppm)	2 ppm
Estonia	Regulatory reference	Vabariigi Valitsuse 18. septembri 2001. a määruse nr 293
Finland	Local name	Vetyperoksidi
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (ppm)	1 ppm
Finland	HTP-arvo (15 min)	4.2 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min) (ppm)	3 ppm
Finland	Regulatory reference	HTP-ARVOT 2016 (Sosiaali- ja terveysministeriö)
France	Local name	Peroxyde d'hydrogène (Eau oxygénée)
France	VME (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
France	VME (ppm)	1 ppm
France	Note (FR)	Valeurs recommandées/admises
France	Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Greece	OEL TWA (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Greece	OEL TWA (ppm)	1 ppm
Greece	OEL STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Ireland	Local name	Hydrogen peroxide
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	1.5 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (ppm)	1 ppm
Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (ppm)	2 ppm
Ireland	Regulatory reference	Code of Practice for the Chemical Agents Regulations 2016
Lithuania	Local name	Vandenilio peroksidas
Lithuania	IPRV (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Lithuania	IPRV (ppm)	1 ppm
Lithuania	NRV (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Lithuania	NRV (ppm)	2 ppm
Lithuania	Remark (LT)	Ū (ūmus poveikis)
Lithuania	Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011
Poland	Local name	Nadtlenek wodoru
Poland	NDS (mg/m <sup>3</sup> )	0.4 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	0.8 mg/m <sup>3</sup>
Poland	Regulatory reference	Dz. U. 2017 poz. 1348
Portugal	Local name	Peróxido de hidrogénio
Portugal	OEL TWA (ppm)	1 ppm
Portugal	Regulatory reference	Norma Portuguesa NP 1796:2014
Slovakia	Local name	Peroxid vodíka
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Slovakia	NPHV (priemerná) (ppm)	1 ppm
Slovakia	OEL STEL (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
Slovakia	OEL STEL (ppm)	2 ppm
Slovakia	Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (Zmena: 300/2007 Z.z.; Zmena: 471/2011 Z.z.)
Slovenia	Local name	vodikov peroksid

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Hydrogen peroxide solution, 35%		
Slovenia	OEL TWA (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Slovenia	OEL TWA (ppm)	1 ppm
Slovenia	KTV factor SL	1
Slovenia	Regulatory reference	Uradni list RS, št. 102/2010 z dne 17.12.2010
Spain	Local name	Peróxido de hidrógeno
Spain	VLA-ED (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Spain	VLA-ED (ppm)	1 ppm
Spain	Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2017. INSHT
Sweden	Local name	Väteperoxid
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (ppm)	1 ppm
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Sweden	kortidsvärde (KTV) (ppm)	2 ppm
Sweden	Regulatory reference	Hygieniska gränsvärden (AFS 2015:7)
United Kingdom	Local name	Hydrogen peroxide
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	1 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	2.8 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	2 ppm
United Kingdom	Regulatory reference	EH40. HSE
Iceland	Local name	Vetnisperoxíð
Iceland	OEL (8 hours ref) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Iceland	OEL (8 hours ref) (ppm)	1 ppm
Iceland	Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway	Local name	Hydrogenperoksid
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Norway	Grenseverdier (AN) (ppm)	1 ppm
Norway	Regulatory reference	Arbeidstilsynet. Forskrift, best.nr. 704
Switzerland	Local name	Wasserstoffperoxid
Switzerland	MAK (mg/m <sup>3</sup> )	0.71 mg/m <sup>3</sup>
Switzerland	MAK (ppm)	0.5 ppm
Switzerland	KZGW (mg/m <sup>3</sup> )	0.71 mg/m <sup>3</sup>
Switzerland	KZGW (ppm)	0.5 ppm
Switzerland	Remark (CH)	SS <sub>C</sub> - Auge & Haut & OAW, Asthma - DFG, OSHA
Switzerland	Regulatory reference	SUVA - Grenzwerte am Arbeitsplatz 2016
Australia	Local name	Hydrogen peroxide
Australia	TWA (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
Australia	TWA (ppm)	1 ppm
USA - ACGIH	Local name	Hydrogen peroxide
USA - ACGIH	ACGIH TWA (ppm)	1 ppm
USA - ACGIH	Remark (ACGIH)	Eye, URT, & skin irr
USA - ACGIH	Regulatory reference	ACGIH 2017
USA - OSHA	Local name	Hydrogen peroxide
USA - OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1.4 mg/m <sup>3</sup>
USA - OSHA	OSHA PEL (TWA) (ppm)	1 ppm
hydrogen peroxide solution ... %		
EU	Local name	Hydrogen peroxide
EU	Notes	(Ongoing)
EU	Regulatory reference	SCOEL Recommendations

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



### 8.2. Exposure controls

#### Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: nitrile rubber. GIVE GOOD RESISTANCE: natural rubber, nitrile rubber, butyl rubber, polyethylene, PVC, viton. GIVE LESS RESISTANCE: neoprene, polyethylene/ethylenevinylalcohol. GIVE POOR RESISTANCE: leather, PVA, natural fibres

#### Hand protection:

Gloves

#### Eye protection:

Face shield, Safety goggles

#### Skin and body protection:

Protective clothing. If splashes are likely to occur: Boots, Polyvinylchloride (PVC), Natural rubber

#### Respiratory protection:

Full face mask with filter type B at conc. in air > exposure limit

Device	Filter type	Condition	Standard
Full face piece respirator	Type NO P3 (white), Type NO P3 (blue)	If conc. in air > exposure limit	

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Molecular mass	: 34.01 g/mol
Colour	: Colourless.
Odour	: Irritating/pungent odour.
Odour threshold	: No data available.
pH	: 1 - 4
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: -33 °C
Freezing point	: No data available.
Boiling point	: 108 °C
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available.
Flammability (solid, gas)	: No data available.
Vapour pressure	: 12 hPa (20 °C, %50 H <sub>2</sub> O <sub>2</sub> )
Relative vapour density at 20 °C	: No data available.
Relative density	: 1.13 g/cm <sup>3</sup> (20 °C)
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Water: complete
Log Pow	: -1.1
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: 1.249 mPa·s (20 °C, Pure substance)
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

### 9.2. Other information

Minimum ignition energy	: Not applicable
VOC content	: Not applicable (inorganic)
Other properties	: Clear. Physical properties depending on the concentration. Substance has acid reaction.

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Decomposes slowly on exposure to light: oxidation resulting in increased fire or explosion risk with pressure rise and possible bursting of container. This reaction is accelerated on exposure to impurities and on exposure to temperature rise. Reacts violently with combustible materials: risk of spontaneous ignition. Violent to explosive reaction with many compounds e.g. (some) metals and their compounds, (some) acids/bases, organic material, oxygen compounds, (strong) reducers and (some) metal powders: (increased) risk of fire. Reacts violently with oils/fats.

#### 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.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Oral: Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

ATE CLP (oral)	500 mg/kg bodyweight
LD50 oral rat	1232 mg/kg
LD50 dermal rabbit	> 2.000 mg/kg

Skin corrosion/irritation : Causes skin irritation.  
pH: 2.02 (50 %, 21 °C)

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

Potential adverse human health effects and symptoms : Harmful if swallowed. Causes skin irritation. May cause respiratory irritation. 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.

Ecology - air : 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.

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

#### 12.2. Persistence and degradability

<b>Hydrogen peroxide solution, 35%</b>	
Persistence and degradability	Biodegradability: not applicable.



# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



Hydrogen peroxide solution, 35%	
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

Hydrogen peroxide solution, 35%	
Log Pow	-1.1
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

Hydrogen peroxide solution, 35%	
Surface tension	80.4 mN/m (20 °C, Pure substance, Calculated value, 100 %)
Ecology - soil	No (test)data on mobility of the components 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

Regional legislation (waste)	: LWCA (the Netherlands): KGA category 01.
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.
Additional information	: 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 / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
2014	2014	2014	2014	2014
<b>14.2. UN proper shipping name</b>				
Hydrogen peroxide, aqueous solution	hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution
<b>Transport document description</b>				
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	UN 2014 Hydrogen peroxide, aqueous solution, 5.1 (8), II	UN 2014 Hydrogen peroxide, aqueous solution, 5.1 (8), II
<b>14.3. Transport hazard class(es)</b>				
5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)	5.1 (8)
		Not applicable		
<b>14.4. Packing group</b>				
II	II	Not applicable	II	II
<b>14.5. Environmental hazards</b>				
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

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



ADR	IMDG	IATA	ADN	RID
No supplementary information available				

### 14.6. Special precautions for user

#### - Overland transport

Transport regulations (ADR) : Subject

Classification code (ADR) : OC1

Hazard identification number (Kemler No.) : 58

Orange plates :



Tunnel restriction code (ADR) : E

EAC code : 2P

#### - Transport by sea

Transport regulations (IMDG) : Subject

EmS-No. (Fire) : F-H

EmS-No. (Spillage) : S-Q

#### - Air transport

Transport regulations (IATA) : Forbidden

#### - Inland waterway transport

Classification code (ADN) : OC1

Carriage permitted (ADN) : T

#### - Rail transport

Transport regulations (RID) : Subject

Classification code (RID) : OC1

### 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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	hydrogen peroxide solution ... %
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	hydrogen peroxide solution ... %
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Hydrogen peroxide solution, 35% - hydrogen peroxide solution ... %

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : Not applicable (inorganic)

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to waters (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

# Hydrogen peroxide solution, 35%

## Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/03/2018 Version: 0.0

Doc. No: SDS-932.122/1



### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

### Denmark

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

## 15.2. Chemical safety assessment

No additional information available.

## SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Ox. Liq. 1	Oxidising Liquids, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

SDS ISOLAB (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*