



























# Safety Data Sheet

According To Regulation (EC) No 1907/2006 (REACH)

## HYDROGEN PEROXIDE

Version: 3.0  
 Revision Date: 01/01/2021 Next revision Date: 01/01/2022 Preparation Date: 25/12/2008

- No data available.

### 11. TOXICOLOGICAL INFORMATION

#### 10.8 General Information

- Exposure Routes: Inhalation and Oral.
- Target organ effects: Skin Corrosive and respiratory and eye irritant.

#### 11.1 Acute toxicity

Acute oral toxicity

- LD50, rat, 1,193 - 1,270 mg/kg (H2O2 35 %)

Acute inhalation toxicity

- LC50, 4 h, rat, > 0.17 mg/l (H2O2 50 %), Remarks: vapour

Acute dermal toxicity

- LD50, rabbit, > 2,000 mg/kg (H2O2 35 %)

#### 11.2 Skin corrosion/irritation and Eye damage/irritation:

Skin irritation

- rabbit, Skin irritation (H2O2 35 %)

Eye irritation

- rabbit, Severe eye irritation (H2O2 10 %)

Irritation (other route)

- Inhalation, Human experience, Irritating to respiratory system., 665 mg/m<sup>3</sup>, RD 50, (H2O2 50 %)

#### 11.3 CMR effects (Carcinogenicity) :

This product is not considered to be a carcinogen by IARC<sup>1</sup>, ACGIH<sup>2</sup>, NTP<sup>3</sup> or OSHA<sup>4</sup>.  
 Oral, Prolonged exposure, mouse, Target Organs: duodenum, carcinogenic effects  
 - Dermal, Prolonged exposure, mouse, Animal testing did not show any carcinogenic effects

#### 11.4 CMR effects (Mutagenicity and Toxicity for reproduction) :

- No indication of mutagenicity when tested in vitro in the Bacterial Reverse Mutation Assay and in vivo using the Micronucleus Assay.
- Genetic toxicity in vitro
- - In vitro tests have shown mutagenic effects.
- Genetic toxicity in vivo
- - In vivo tests did not show mutagenic effects
- Substance is totally biotransformed (metabolised).
- - study scientifically unjustified

#### 11.5 Other Toxicological Effects:

Allergic Effects	No data available.
Effects on Repeated Doses Chronic Exposures	Chronic toxicity
	- Oral, 90-day, mouse, Target Organs: Gastrointestinal tract, Lowest observable effect level: 300 ppm, LOAEL - Oral, 90-day, mouse, NOEL: 100 ppm, NOAEL - Inhalation, 28-day, rat, Target Organs: Respiratory system, Lowest observable effect level: 10 ppm,

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	LOAEL, vapour - Inhalation, 28-day, rat, NOEL: 2 ppm, NOAEL, vapour
Sensitization	Guinea pig; Did not cause sensitization on laboratory animals.
Developmental Toxicity (Teratogenicity)	No data available.
Fertility	No data available.
Toxicokinetics	No data available

### 11.6 STOT-single/repeated exposures:

STOT-single exposure	No data available
STOT-repeated exposure	No data available.

### 11.7 Symptoms related to the physical, chemical and toxicological characteristics:

In case of inhalation	Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough. - Risk of: Nose bleeding, chronic bronchitis.
In case of skin contact	Irritation - Risk of: Burn
In case of eye contact	Severe eye irritation - Risk of serious damage to eyes. - Symptoms: Redness, Lachrymation, Swelling of tissue
In case of ingestion	Severe irritation

### 11.8 Additional Toxicological Information:

- Toxicological classifications are based on available knowledge and information
- EEC classification: T; Toxic , C; Corrosive
- The special effects to health are considered by taking into account the information in section 3.

## 12.ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:

#### Acute toxicity

- Fishes, *Pimephales promelas*, LC50, 96 h, 16.4 mg/l
- Fishes, *Pimephales promelas*, NOEC, 96 h, 4.3 mg/l
- Crustaceans, *Daphnia pulex*, EC50, 48 h, 2.4 mg/l

Remarks: fresh water, semi-static test

- Crustaceans, *Daphnia pulex*, NOEC, 48 h, 1 mg/l

Remarks: fresh water, semi-static test

#### Chronic toxicity

- Algae, *Skeletonema costatum*, EC50, growth rate, 72 h, 2.6 mg/l
- Algae, *Skeletonema costatum*, NOEC, 72 h, 0.63 mg/l
- Algae, *Chlorella vulgaris*, EC50, Growth rate, 72 h, 4.3 mg/l
- Algae, *Chlorella vulgaris*, NOEC, 72 h, 0.1 mg/l

### 12.2 Photo degradation

No data available.

### 12.3 Effects on Waste Water Treatment Plants

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*Product has inhibitory effects on the activities of micro-organisms, whether the Information is not related, the likely impact on waste water treatment plants is unknown.*

### 12.4 Mobility

*Liquid.*

*Highly soluble in water, 100 %*

<i>Water threat class</i>	<i>No data available</i>
<i>Clean Water Impact</i>	<i>No data available</i>
<i>Known or predicted environmental distribution</i>	<i>No data available</i>

### 12.5 Results of PBT and vPvB assessment

#### Persistence and degradability

##### Abiotic degradation

*- Air, indirect photo-oxidation, t 1/2 24 h*

*Conditions: sensitizer: OH radicals*

*- Water, redox reaction, t 1/2 120 h*

*Conditions: mineral and enzymatic catalysis, fresh water, salt water*

*- Soil, redox reaction, t 1/2 12 h*

*Conditions: mineral and enzymatic catalysis*

##### Biodegradation

*- aerobic, t 1/2 < 2 min*

*Conditions: biological treatment sludge*

*Remarks: Readily biodegradable.*

*- aerobic, t 1/2 from 0.3 - 5 d*

*Conditions: fresh water*

*Remarks: Readily biodegradable.*

*- anaerobic*

*Conditions: Soil/sediments*

*Remarks: not applicable*

#### **Bioaccumulation Potential :**

*Bioaccumulative potential: -1.57*

*Result: Does not bioaccumulate.*

### 12.6 Additional information

- log Pow@20°C: 1.78 x 10<sup>-12</sup>*
- Harmful to aquatic life.*
- Do not allow to be released into the environment*
- See the sections 6, 7, 13, 14 and 15.*

## 13.DISPOSAL CONSIDERATIONS

### 13.1 Product / Packaging disposal

- Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.*
- Offer surplus and non-recyclable solutions to a licensed disposal company.*
- Contact a licensed professional waste disposal service to dispose of this material.*

### 13.2 Contaminated packaging

- Empty containers.*



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- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.
- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations.
- All residual material must be emptied and the containers recycled where possible. Where recycling is not possible, containers must be disposed of in accordance with Federal (country-specific), state, and local regulations.
- If questions exist about disposal, please contact the manufacturer for additional information.
- If there is product residue in the emptied container, follow directions for handling on the container's label.

### 13.3 Disposal Methods

- This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
- Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- If this product has been altered or contaminated with other hazardous materials, appropriate waste analysis may be necessary to determine proper method for disposal.

### 13.4 European Waste Catalogue

- According to the European Waste Catalogue, Waste Codes are not product specific but application specific. Waste Codes should be assigned by the User based on the application in which the product is used.
- Uncleaned packaging must be disposed of in accordance with official local regulations
- The final classification has to be done together with the local waste disposal company / authority.

## 1. TRANSPORT INFORMATION

**UN 2014- HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)**

	ADR <sup>5</sup> /RID <sup>6</sup>	ADNR	IMDG <sup>7</sup>	ICAO <sup>8</sup> /IATA <sup>9</sup>
TRANSPORTATION	Road	River	Marine	Airways
PROPER SHIPPING NAME	UN 2014- HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary)			
UN/ID No.	2014	2014	2014	2014
SYMBOL				



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<b>CLASS</b>	5,1	5,1	5,1	5,1
<b>PACKAGING GROUP</b>	II	II	II	II
<b>LABELLING NO</b>	5.1+8	5.1+8	5.1+8	5.1+8
<b>CLASSIFICATION CODE</b>	OCI			
<b>HAZARD NO (HIN NO)</b>	58			
<b>EmS</b>			F-H;S-Q	
<b>MARINE Pollutant</b>			NO	

**Road Transport Notes:** This product is not regulated as a hazardous material.

### 15.REGULATORY INFORMATION

#### 15.1 Safety, Health And Environmental Regulations /Legislation Specific For The Substance:

- Regulation (EC) 1907/2006 (REACH);
- Regulation (EC) No 1272/2008 of the European parliament and of the council 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;
- Commission regulation (EU) No 453/2010, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH);
- in compliance with applicable Classification and Labeling Procedure for Hazardous Chemical Substances and Preparations;
- in compliance with applicable Procedure of Safety Data Sheet Requirements and Supply thereof to Professional Users;
- in compliance with applicable General Regulations for Storage of Hazardous Chemical Substances and Preparations;
- Price thereof;
- in compliance with 67/548/EEC Directive;
- in compliance with European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).
- Toxic Substance Control Act list (TSCA) : - In compliance with inventory.
- Australian Inventory of Chemical Substances (AICS): - In compliance with inventory.
- Canadian Domestic Substances List (DSL) : - In compliance with inventory.
- Korean Existing Chemicals Inventory (KECI (KR)) : - In compliance with inventory.
- EU list of existing chemical substances (EINECS): - In compliance with inventory.
- Japanese Existing and New Chemical Substances (MITI List) (ENCS) : - In compliance with inventory.
- Inventory of Existing Chemical Substances (China) (IECS) : - In compliance with inventory.
- Philippine Inventory of Chemicals and Chemical Substances (PICCS) : - In compliance with inventory.
- New Zealand Inventory of Chemicals (NZIOC) : - In compliance with inventory.

#### 15.2 Chemical Safety Assessment

##### 15.2.1 HAZARD

CLP classification according to Annex VI of CLP (Regulation (EC) No 1272/2008)

- May intensify fire; oxidizer.
- Harmful if swallowed
- Causes severe skin burns and eye damage





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- Causes serious eye damage
- Harmful if inhaled.
- May cause respiratory irritation

### 15.2.2 RISK

Risk Codes:

- Heating may cause an explosion
- Contact with combustible material may cause fire
- Harmful by inhalation and if swallowed
- Causes burns

### 15.3 Label Elements

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 and ISO 11014:2009. This product is classified according to EU Directive 67/548/EC and GHS/CLP.

- System of specific information relating to Dangerous Preparations: 2001/58/EC as amended by Directive 93/112/EC, 2001/58/EC and 2006/8/EC.

## 16. OTHER INFORMATION

### 16.1 Other Information

- For additional information regarding **Descon Oxychem limited** products please contact the - [info@desconoxychem.com](mailto:info@desconoxychem.com)
- The above information complies with the 199/45/EC and 1907/2006 Directives and their amendments.
- In all cases of potential poisoning supportive therapy is of the utmost importance.

### 16.2 Related Person

- Tauheed Ahmed Khan
- Prepared by: Muhammad Arif  
[Arif.Muhammad@descon.com](mailto:Arif.Muhammad@descon.com)

### 16.3 Revision Date:

- Revision Date: 01/01/2018 Next revision Date: 01/01/2019
- Version: 3.0 /EN

### 16.4 Reason of issue

- Compiling according to Regulation (EC) No 1272/2008 [CLP/GHS]

### 16.7 Relevant R-, H- and EUH Phrases (number of full text)

<b>R5</b>	Heating may cause an explosion
<b>R8</b>	Contact with combustible material may cause fire
<b>R20/22</b>	Harmful by inhalation and if swallowed.
<b>R35</b>	Causes severe burns.
<b>H271</b>	May cause fire or explosion; strong oxidiser.
<b>H302</b>	Harmful if swallowed.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage

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<b>H332</b>	<i>Harmful if inhaled.</i>
<b>H335</b>	<i>May cause respiratory irritation</i>
<b>16.8 Legal disclaimer:</b>	
<ul style="list-style-type: none"> <li>· <i>The purpose of the above information is to describe the products only in terms of health and safety requirements.</i></li> <li>· <i>The information given should not, therefore, be construed as guaranteeing specific properties or as specification.</i></li> <li>· <i>Customers should satisfy themselves as to the suitability and completeness of such information for their own particular use.</i></li> <li>· <i>The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.</i></li> <li>· <i>The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.</i></li> <li>· <u><i>The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.</i></u></li> </ul>	

<sup>1</sup> IARC- International Agency For Research On Cancer

<sup>2</sup> ACGIH- American Governmental Conference of Industrial Hygienists

<sup>3</sup> NTP- National Toxicology Program

<sup>4</sup> OSHA- Occupational Safety and Health Administration

<sup>5</sup> ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

<sup>6</sup> RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

<sup>7</sup> IMDG: International Maritime Code for Dangerous Goods

<sup>8</sup> ICAO: International Civil Aviation Organization

<sup>9</sup> IATA: International Air Transport Association