Biorad Hydrogen peroxide

Safety Data Sheet

In accordance with the Regulation on Safety Data Sheets Regarding Hazardous Substances and Mixtures published in the Official Journal numbered 29204 on December 13, 2014

Version: 1.0 Issue date: 8/16/2021

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

1.1. Product identifier

Product form : Mixture

Trade name : Biorad Aqua Oxygen

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

Use of the substance/mixture : Disinfectant

1.3. Details of the supplier of the safety data sheet

Necm Kimya Akaryakıt Ürünleri ve Medikal Malzemeler Sanayi ve Ticaret Limitet Şirketi
Battal Gazi Mah. Şark Cad. Aytop Gıda Sitesi I.Blok No:14
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1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Turkey	Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzıssıhha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.

Not classified

Adverse physicochemical, human health and environmental effects : To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.

EUH-statements (SEA) : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.
Hydrogen peroxide (H2O2)	(CAS-No.) 7722-84-1 (EC-No.) 231-765-0 (EC Index-No.) 008-003-00-9	6	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Hydrogen peroxide (H2O2)	(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 (35 ≤C ≤ 100) STOT SE 3, H335 (50 ≤C < 70) Ox. Liq. 2, H272 (50 ≤C < 70) Skin Corr. 1B, H314 (70 ≤C ≤ 100) Skin Corr. 1A, H314 (70 ≤C ≤ 100) Ox. Liq. 1, H271

Full text of H and EUH statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If experiencing respiratory symptoms: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

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

5.3. Advice for firefighters

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

Emergency procedures : Ventilate spillage area.

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.

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

Precautions for safe handling : Ensure good ventilation of the work station.

Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen peroxide (H2O2) (7722-84-1)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	3 mg/m³
Long-term - local effects, inhalation	1.4 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1.93 mg/m³
Long-term - local effects, inhalation	0.21 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.0126 mg/l
PNEC aqua (marine water)	0.0126 mg/l
PNEC aqua (intermittent, freshwater)	0.0138 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.047 mg/kg dwt
PNEC sediment (marine water)	0.047 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.0023 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	4.66 mg/l

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves

Eye protection : Safety glasses

Respiratory protection : No respiratory protection needed under normal use conditions

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 : Clear
Colour : Colourless
Odour : No data available
pH : 5.5 – 6.5
Relative evaporation rate (butylacetate=1) : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0.96 – 1.02 g/ml
Solubility : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Hydrogen peroxide (H2O2) (7722-84-1)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:US EPA Toxic Substance Health Effects Test Guidelines (PB82-232984, 1982), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Not classified
pH: 5.5 – 6.5
Serious eye damage/irritation : Not classified
pH: 5.5 – 6.5
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Hydrogen peroxide (H2O2) (7722-84-1)	
STOT-single exposure	May cause respiratory irritation.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Hydrogen peroxide (H2O2) (7722-84-1)	
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	1.38 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	1.25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.63 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Biorad Aqua Oxygen	
Bioaccumulative potential	No additional information available

12.4. Mobility in soil

Biorad Aqua Oxygen	
Mobility in soil	No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste Management Regulation published in the Official Journal numbered 29314 on April 2, 2015.

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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. National regulations

Local regulations (Turkey) : Regulation on Transportation of Dangerous Goods by Road published in the Official Journal numbered 28801 on October 24, 2013

Personal Protective Equipment Regulation published in the Official Journal numbered 30761 on May 1, 2019

Regulation on Use of Personal Protective Equipments in Workplaces published in the Official Journal numbered 28695 on July 2, 2013

Occupational Health and Safety Regulation published in the Official Journal numbered 25311 on December 9, 2003

Regulation on Test Methods that will be Applied to Determine the Physicochemical, Toxicological and Ecotoxicological Properties of Substances and Mixtures published in the Official Journal numbered 28848 on December 11, 2013

Regulation on Health and Safety Precautions When Working with Chemical Substances published in the Official Journal numbered 28733 on August 12, 2013

Regulation on Health and Safety Precautions When Working with Carcinogenic and Mutagenic Substances published in the Official Journal numbered 28730 on August 6, 2013.

This product doesn't contain any substances that is controlled or prohibited for use according to the Regulation on Ozone Depleting Substances published in the Official Journal numbered 30031 on April 7, 2017.

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
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
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
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). Classification according to Classification, Labelling and Packaging of Substances and Mixtures (SEA) Regulation published in the Official Journal numbered 28848 on December 11, 2013.

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
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

Safety Data Sheet author's

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Certificate valid until	30/04/2024
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Safety Data Sheet (SDS), Turkey

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.