

Hydrogen Peroxide 35% Food Grade

Version 2 | Revision Date 01/27/2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Product name Hydrogen Peroxide 35% Food Grade
- Chemical name Hydrogen peroxide
- Synonyms Hydrogen peroxide, aqueous solution
- Molecular formula H₂O₂

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Food additive

1.3 Details of the supplier of the safety data sheet**Company**

BREEN LABS
849 SANDHILL AVENUE
CARSON, CA 90746
USA
Tel: +1-424-232-8888
Fax: +1-424-232-8878

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture**HCS 2012 (29 CFR 1910.1200)**

- | | |
|--|--|
| Acute toxicity, Category 4 | H302: Harmful if swallowed. |
| Skin irritation, Category 2 | H315: Causes skin irritation. |
| Serious eye damage, Category 1 | H318: Causes serious eye damage. |
| Specific target organ toxicity - single exposure, Category 3 | H335: May cause respiratory irritation. (Respiratory system) |

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2.2 Label elements

HCS 2012 (29 CFR 1910.1200)**Pictogram****Signal Word**

- Danger

Hazard Statements

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

Precautionary StatementsPrevention

- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash skin 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/ eye protection/ face protection.

Response

- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.

Storage

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards which do not result in classification

- H401: Toxic to aquatic life.

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Not applicable, this product is a mixture.

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3.2 Mixture

- | | |
|-----------------|-------------------------------------|
| - Synonyms | Hydrogen peroxide, aqueous solution |
| - Formula | H ₂ O ₂ |
| - Chemical name | Hydrogen peroxide |

Hazardous Ingredients and Impurities

Chemical name	Identification number CAS-No.	Concentration [%]
Hydrogen peroxide (H ₂ O ₂)	7722-84-1	>= 34 - <= 36

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First aid measures

4.1 Description of first-aid measures**General advice**

- Show this material safety data sheet to the doctor in attendance.

In case of inhalation

- Move to fresh air.
- Oxygen or artificial respiration if needed.
- Victim to lie down in the recovery position, cover and keep him warm.
- Call a physician immediately.

In case of skin contact

- Remove and wash contaminated clothing before re-use.
- Wash off with soap and water.
- If symptoms persist, call a physician.

In case of eye contact

- Call a physician or poison control center immediately.
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Take victim immediately to hospital.

In case of ingestion

- Call a physician or poison control center immediately.
- Take victim immediately to hospital.
- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.
- Artificial respiration and/or oxygen may be necessary.

- If victim is unconscious:
- Artificial respiration and/or oxygen may be necessary.

- If victim is conscious:
- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed**In case of inhalation****Symptoms**

- Breathing difficulties

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- Cough
- pulmonary edema
- Nausea
- Vomiting

Effects

- Corrosive to respiratory system.

Repeated or prolonged exposure

- Nose bleeding
- Risk of chronic bronchitis

In case of skin contact**Symptoms**

- Redness
- Swelling of tissue

Effects

- Prolonged skin contact may cause skin irritation.

In case of eye contact**Symptoms**

- Redness
- Lachrymation
- Swelling of tissue

Effects

- Corrosive
- Causes severe burns.
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

In case of ingestion**Symptoms**

- Nausea
- Abdominal pain
- Bloody vomiting
- Diarrhea
- Suffocation
- Cough
- Severe shortness of breath

Effects

- If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
- Risk of respiratory disorder

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- Take victim immediately to hospital.
- Immediate medical attention is required.
- Consult with an ophthalmologist immediately in all cases.
- If swallowed
- Avoid gastric lavage (risk of perforation).
- Keep under medical supervision for at least 48 hours.

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SECTION 5: Firefighting measures

<u>Flash point</u>	does not flash
<u>Autoignition temperature</u>	The product is not flammable.
<u>Flammability / Explosive limit</u>	No data available

5.1 Extinguishing media**Suitable extinguishing media**

- Water
- Water spray

Unsuitable extinguishing media

- None.

5.2 Special hazards arising from the substance or mixture**Specific hazards during fire fighting**

- Decomposition will cause oxygen release which may intensify fire
- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Risk of explosion if heated under confinement.

Hazardous combustion products:

- Oxygen

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.
- Wear chemical resistant oversuit

Further information

- Keep product and empty container away from heat and sources of ignition.
- Keep containers and surroundings cool with water spray.
- Approach from upwind.
- Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****Advice for non-emergency personnel**

- Evacuate personnel to safe areas.
- Keep people away from and upwind of spill/leak.

Advice for emergency responders

- Use personal protective equipment.
- Drying of this product on clothing or combustible materials may cause fire.
- Keep wetted with water.

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- Prevent further leakage or spillage.
- Keep away from incompatible products

6.2 Environmental precautions

- In case of accidental release or spill, immediately notify the appropriate authorities if required by Federal, State/Provincial and local laws and regulations.
- Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations.

6.3 Methods and materials for containment and cleaning up

- Dilute with plenty of water.
- Dam up.
- Do not mix waste streams during collection.
- Soak up with inert absorbent material.
- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

- Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Use only in well-ventilated areas.
- Before all operations, passivate the piping circuits and vessels according to the procedure recommended by the producer.
- Use only clean and dry utensils.
- Never return unused material to storage receptacle.
- Keep away from heat.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Keep away from incompatible products

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

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Technical measures/Storage conditions

- Keep only in the original container.
- Store in a receptacle equipped with a vent.
- Store in a well-ventilated place. Keep cool.
- Keep in properly labeled containers.
- Keep container closed.
- Keep in a contained area
- Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
- Regularly check the condition and temperature of the containers.

- Keep away from:
- Incompatible products

Packaging material**Suitable material**

- aluminum 99.5%
- stainless steel 304L / 316L
- Approved grades of HDPE.

7.3 Specific end use(s)

- Contact your supplier for additional information

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters**Components with workplace occupational exposure limits**

Components	Value type	Value	Basis
Hydrogen peroxide (H ₂ O ₂)	TWA	1 ppm 1.4 mg/m ³	National Institute for Occupational Safety and Health
Hydrogen peroxide (H ₂ O ₂)	TWA	1 ppm	American Conference of Governmental Industrial Hygienists
Hydrogen peroxide (H ₂ O ₂)	TWA	1 ppm 1.4 mg/m ³	Occupational Safety and Health Administration - Table Z-1 Limits for Air Contaminants
The value in mg/m ³ is approximate.			

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NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)

Components	CAS-No.	Concentration
Hydrogen peroxide (H ₂ O ₂)	7722-84-1	75 parts per million

8.2 Exposure controls**Control measures****Engineering measures**

- Provide adequate ventilation.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures**Respiratory protection**

- Use respirator when performing operations involving potential exposure to vapor of the product.
- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Respirator with a vapor filter (EN 141)
- Recommended Filter type: ABEK-P2
- Respirator with a vapor filter
- Self-contained breathing apparatus in case of: 1) large uncontrolled emissions, 2) insufficient oxygen, 3) the mask and cartridge do not give adequate protection.

Hand protection

- Impervious gloves
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Suitable material

- Nitrile rubber
- Break through time: > 480 min
- Glove thickness: 1.3 mm

- Nitrile/Neopren gloves
- Break through time: 190 min
- Glove thickness: 0.2 mm

Eye protection

- Chemical resistant goggles must be worn.
- If splashes are likely to occur, wear:
 - Tightly fitting safety goggles
 - Face-shield

Skin and body protection

- Impervious clothing
- If splashes are likely to occur, wear:
 - Chemical resistant apron
 - Boots

- Suitable material
 - PVC
 - Natural Rubber

Hygiene measures

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.

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- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

Appearance

Physical state: liquid

Odor

Color: colorless
pungent

Odor Threshold

No data available

Molecular weight

34 g/mol

pH

2.0 (70 °F (21 °C))
H₂O₂ 50 %
pKa: 11.6 (77 °F (25 °C))

Melting point/freezing point

Freezing point: -27 °F (-33 °C)
H₂O₂ 35 %

Initial boiling point and boiling range

Boiling point/boiling range: 226 °F (108 °C)
H₂O₂ 35 %

Flash point

does not flash

Evaporation rate (Butylacetate = 1)

No data available

Flammability (liquids)

The product is not flammable.

Flammability / Explosive limit

Explosiveness:
Not explosive
With certain materials (see section 10).

Autoignition temperature

The product is not flammable.

Vapor pressure

18 mmHg (24 hPa) (86 °F (30 °C))
H₂O₂ 50 %

Vapor density

1
H₂O₂ 50 %

Density

Bulk density: Not applicable

Relative density

1.1 - 1.2

Solubility

Water solubility:
completely soluble

Partition coefficient: n-octanol/water

log Pow: -1.57
Method: Calculation method

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<u>Decomposition temperature</u>	≥ 140 °F (≥ 60 °C) Self-Accelerating decomposition temperature (SADT)
<u>Decomposition temperature</u>	< 140 °F (< 60 °C) Slow decomposition
<u>Viscosity</u>	<u>Viscosity, dynamic</u> : 1.19 mPa.s (68 °F (20 °C)) H2O2 50 %
<u>Explosive properties</u>	No data available
<u>Oxidizing properties</u>	No data available

9.2 Other information

<u>Surface tension</u>	75.6 mN/m (68 °F (20 °C)) H2O2 50 %
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SECTION 10: Stability and reactivity**10.1 Reactivity**

- Contact with other material may cause fire.
- Decomposes on heating with potential large quantities of gas release (oxygen).
- Potential for exothermic hazard

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Contact with incompatible material may cause exothermic decomposition with gas release.
- Risk of explosion if heated under confinement.
- Fire or intense heat may cause violent rupture of packages.

10.4 Conditions to avoid

- Contamination
- To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials

- Acids
- Bases
- Metals
- Heavy metal salts
- Powdered metal salts
- Reducing agents
- Organic materials
- Flammable materials

10.6 Hazardous decomposition products

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- Oxygen

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**Hydrogen peroxide (H₂O₂)

Acute toxicity estimate : 431 mg/kg - Rat , male and female

Method: OECD Test Guideline 401

This product is classified as acute toxicity category 4

Unpublished reports

Acute inhalation toxicityHydrogen peroxide (H₂O₂)

LC50 - 4 h (vapor) : > 0.17 mg/l - Rat

Method: OECD Test Guideline 403

Not classified as hazardous for acute inhalation toxicity according to GHS.

Unpublished reports

Acute dermal toxicityHydrogen peroxide (H₂O₂)

Acute toxicity estimate : 6,440 mg/kg - Rabbit

Method: OECD Test Guideline 402

Not classified as hazardous for acute dermal toxicity according to GHS.

Unpublished reports

Acute toxicity (other routes of administration)

No data available

Skin corrosion/irritation

Not classified as irritating to skin

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitizationHydrogen peroxide (H₂O₂)

Does not cause skin sensitization.

Mutagenicity**Genotoxicity in vitro**Hydrogen peroxide (H₂O₂)

Ames test

with and without metabolic activation

positive

Published data

Chromosome aberration test in vitro

with and without metabolic activation

positive

Unpublished reports

Genotoxicity in vivo

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Hydrogen peroxide (H₂O₂) In vivo micronucleus test - Mouse
Oral
Method: OECD Test Guideline 474

negative
Unpublished reports

Carcinogenicity

Hydrogen peroxide (H₂O₂) No data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

Hydrogen peroxide (H₂O₂) No toxicity to reproduction

Developmental Toxicity/Teratogenicity

Hydrogen peroxide (H₂O₂) No toxicity to reproduction

STOT**STOT-single exposure**

Hydrogen peroxide (H₂O₂) Routes of exposure: Inhalation
Target Organs: Respiratory Tract
May cause respiratory irritation.

STOT-repeated exposure

Hydrogen peroxide (H₂O₂) The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.

Hydrogen peroxide (H₂O₂) Inhalation (vapor) 90-day - Rat
NOAEC: 7 ppm
Target Organs: Respiratory Tract
Method: OECD Test Guideline 413
Unpublished reports

90-day - Rat
NOAEL: 100 ppm
Target Organs: Gastrointestinal tract
Method: OECD Test Guideline 408
drinking water
Unpublished reports

Experience with human exposure No data available

Aspiration toxicity No data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment**

Acute toxicity to fish

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Hydrogen peroxide (H₂O₂) LC50 - 96 h : 16.4 mg/l - Pimephales promelas (fathead minnow)
 semi-static test
 Analytical monitoring: yes

Method: according to a standardized method
 Harmful to fish.
 Unpublished internal reports

Acute toxicity to daphnia and other aquatic invertebrates

Hydrogen peroxide (H₂O₂) EC50 - 48 h : 2.4 mg/l - Daphnia pulex (Water flea)
 semi-static test
 Analytical monitoring: yes
 Method: according to a standardized method
 Toxic to aquatic invertebrates.
 Unpublished internal reports

Toxicity to aquatic plants

Hydrogen peroxide (H₂O₂) ErC50 - 72 h : 2.62 mg/l - Skeletonema costatum (marine diatom)
 static test
 Analytical monitoring: yes
 Method: according to a standardized method
 Toxic to algae.
 Unpublished internal reports

Toxicity to microorganisms

Hydrogen peroxide (H₂O₂) EC50 - 0.5 h : 466 mg/l - activated sludge
 static test
 Analytical monitoring: yes
 Method: OECD Test Guideline 209
 Unpublished internal reports

Chronic toxicity to fish No data available

Chronic toxicity to daphnia and other aquatic invertebrates

Hydrogen peroxide (H₂O₂) NOEC: 0.63 mg/l - 21 Days - Daphnia magna (Water flea)
 flow-through test
 Analytical monitoring: yes
 Method: according to a standardized method
 Harmful to aquatic invertebrates with long lasting effects.
 Published data

12.2 Persistence and degradability

Abiotic degradation No data available

Physical- and photo-chemical elimination No data available

Biodegradation

Biodegradability
 Hydrogen peroxide (H₂O₂) Ready biodegradability study:
 Method: Degradation in sewage treatment plants
 The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability
 Inoculum: activated sludge
 Unpublished internal reports

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Degradability assessment

Hydrogen peroxide (H₂O₂) The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential**Partition coefficient: n-octanol/water**

Hydrogen peroxide (H₂O₂) Not potentially bioaccumulable

Bioconcentration factor (BCF)

Hydrogen peroxide (H₂O₂) Not potentially bioaccumulable

12.4 Mobility in soil**Adsorption potential (Koc)**

Hydrogen peroxide (H₂O₂) Adsorption/Soil
 Koc: 1.58
 Log Koc: 0.2
 Method: Structure-activity relationship (SAR)
 Unpublished reports

Known distribution to environmental compartments

Hydrogen peroxide (H₂O₂) Ultimate destination of the product: Water

12.5 Results of PBT and vPvB assessment

Hydrogen peroxide (H₂O₂) This substance is not considered to be persistent, bioaccumulating, and toxic (PBT).

This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects**Ecotoxicity assessment**

Short-term (acute) aquatic hazard Toxic to aquatic life.

Long-term (chronic) aquatic hazard Not classified due to data which are conclusive although insufficient for classification.

SECTION 13: Disposal considerations

13.1 Waste treatment methods**Product Disposal**

- Limited quantity
- Dilute with plenty of water.
- Flush into sewer with plenty of water.
- Maximum quantity
- Contact manufacturer.
- Contact waste disposal services.
- In accordance with local and national regulations.

Waste Code

- Environmental Protection Agency
- Hazardous Waste – YES

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- RCRA Hazardous Waste (40 CFR 302)
- D001 - Ignitable waste – (I)
- D002 - Corrosive waste – (C)

Advice on cleaning and disposal of packaging

- Empty containers.
- 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.

SECTION 14: Transport information

Transportation status: IMPORTANT! Statements below provide additional data on listed transport classification. The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

DOT

14.1 UN number	UN 2014
14.2 Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
ERG No	140
14.5 Environmental hazards	NO
Marine pollutant	

TDG

14.1 UN number	UN 2014
14.2 Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
ERG No	140
14.5 Environmental hazards	NO
Marine pollutant	

NOM

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14.1 UN number	UN 2014
14.2 Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
ERG No	140
14.5 Environmental hazards	NO
Marine pollutant	

IMDG

14.1 UN number	UN 2014
14.2 Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
IMDG Code segregation group	Peroxides (SGG16)
14.3 Transport hazard class	5.1
Subsidiary hazard class	8
Label(s)	5.1 (8)
14.4 Packing group	
Packing group	II
14.5 Environmental hazards	NO
Marine pollutant	
14.6 Special precautions for user	
EmS	F-H , S-Q

For personal protection see section 8.

14.7 Transport in bulk vessels according to IMO instruments
No data available

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IATA

14.1 UN number	UN 2014
14.2 Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3 Transport hazard class	5.1
Subsidiary hazard class:	8
Label(s):	5.1 (8)
14.4 Packing group	II
Packing instruction (cargo aircraft)	554
Max net qty / pkg	5.00 L
Packing instruction (passenger aircraft)	550
Max net qty / pkg	1.00 L
14.5 Environmental hazards	NO
14.6 Special precautions for user	
For personal protection see section 8.	
Remarks	: IATA: permitted under 40%

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIoC inventory. Additional HSNO obligations may apply. Please refer to Section 15 of SDS for New Zealand.
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA ("European

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	Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
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15.2 Federal Regulations**US. EPA EPCRA SARA Title III****SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370)**

Acute toxicity (any route of exposure)	Yes
Skin corrosion or irritation	Yes
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	Yes

The categories not mentioned are not relevant for the product.

Section 313 Toxic Chemicals (40 CFR 372.65)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Components	CAS-No.	Threshold planning quantity	Remarks
Hydrogen peroxide (H2O2)	7722-84-1	1000 lb	Form: >52-100%

Section 302 Emergency Planning Extremely Hazardous Substance Reportable Quantity (40 CFR 355)

Components	CAS-No.	Reportable quantity
Hydrogen peroxide (H2O2)	7722-84-1	1000 lb

Section 304 Emergency Release Notification Reportable Quantity (40 CFR 355)

Components	CAS-No.	Reportable quantity
Hydrogen peroxide (H2O2)	7722-84-1	1000 lb

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

This material does not contain any components with a CERCLA RQ.

15.3 State Regulations**US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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SECTION 16: Other information

Further information

- Distribute new edition to clients
- Update
- See section 1
- See section 2
- See section 3
- See section 8
- See section 14
- See section 15
- NSF permits use of this product for sulfide control and in conjunction with ozone for organic control at a concentration use level of 85 mg/L when followed by chlorination of treated water. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.
- NSF permits use of this product at a maximum use level of 73 mg/L for the following functions:
 - reoxygenation of treated water
 - oxidation of organic residuals
 - oxidation of any reduced products, such as FE(II) and sulfides
- Treatment must be followed by chlorination to a chlorine residual not to exceed 4 mg/L, the EPA's proposed maximum residual level.
- NSF permits use of this product for Dechlorination at a maximum use rate of 23 mg/L. Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.
- NSF permits use of this product for Disinfection & Oxidation at a maximum use rate of 23 mg/L. Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.

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Key or legend to abbreviations and acronyms used in the safety data sheet

- TWA: 8-hour, time-weighted average
- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration
- NTP: National Toxicology Program
- IARC: International Agency for Research on Cancer
- NIOSH: National Institute for Occupational Safety and Health
- ADR: European Agreement on International Carriage of Dangerous Goods by Road.
- ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
- RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
- IMDG: International Maritime Dangerous Goods.
- TWA: Time weighted average
- ATE: Estimated value of acute toxicity
- EC: European Community number
- CAS: Chemical Abstracts Service.
- LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50: Substance concentration causing 50% (half) death in the test animals group.
- EC50: Effective Concentration of the substance causing the maximum of 50%.
- PBT: Persistent, Bioaccumulative and Toxic substance.
- vPvB: Very Persistent and Very Bioaccumulative.
- SEA: Classification, labeling, packaging regulation
- DNEL: Derived No Effect Level
- PNEC: Predicted No Effect Concentration
- BHOT: Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

Hydrogen Peroxide 35% Food Grade

Version 2 | Revision Date 01/27/2023

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