

SAFETY DATA SHEET

Preparation Date: 05/08/2015

Revision Date: 10/24/2018

Revision Number: G3

1. IDENTIFICATION

Product identifier

Product code: HY115
Product Name: HYDROGEN PEROXIDE, 35 PERCENT SOLUTION, FCC

Other means of identification

Synonyms: Hydrogen Peroxide Solution
CAS #: Mixture
RTECS # MX0899500 (Hydrogen Peroxide, 20% to 60%)
Cl#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Oxidizing liquids	Category 2

Label elements

Danger

Hazard statements

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



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful in contact with skin
 May be harmful if inhaled
 May contain gas under pressure

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep/Store away from clothing and other combustible materials
 Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO2 or Halon may provide limited control.

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 or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Water	7732-18-5	64-70
Hydrogen peroxide	7722-84-1	30-36

4. FIRST AID MEASURES

Product code: HY115

Product name: HYDROGEN
 PEROXIDE, 35 PERCENT SOLUTION,
 FCC

2 / 16

First aid measures

- General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.
- Skin Contact:** Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Eye Contact:** Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.
- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
- Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

- Symptoms**
- Severe skin and eye irritation or burns
 - Causes eye damage
 - Inflammation of the eye is characterized by redness, watering and itching
 - Moderate irritant to mucous membranes on inhalation
 - May cause irritation of respiratory tract
 - Coughing
 - Choking sensation
 - Dyspnea (Shortness of breath and difficulty breathing)

Indication of any immediate medical attention and special treatment needed

- Notes to Physician:** Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

Specific hazards arising from the chemical

Hazardous Combustion Products: No information available.

Specific hazards: Oxidizer. Keep away from combustible materials (wood,

paper, oil, clothing, etc.). The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Container explosion may occur under fire conditions or when heated. Hydrogen peroxide mixed with magnesium and a trace of magnesium dioxide will ignite immediately. Soluble fuels (acetone, ethanol, glycerol) will detonate on a mixture with peroxide over 30% concentration, the violence increasing with concentration. Explosive with acetic acid, acetic anhydride, acetone, alcohols, carboxylic acids, nitrogen containing bases, As₂S₃, Cl₂ + KOH, FeS, FeSO₄ + 2 methylpyridine + H₂SO₄, nitric acid, potassium permanganate, P₂O₅, H₂Se, Alcohols + H₂SO₄, Alcohols + tin chloride, Antimony trisulfide, chlorosulfonic acid, Aromatic hydrocarbons + trifluoroacetic acid, Azelaic acid + sulfuric acid (above 45 C), Benzenesulfonic anhydride, tert-butanol + sulfuric acid, Hydrazine, Sulfuric acid, Sodium iodate, Tetrahydrothiophene, Thiodiglycol, Mercurous oxide, mercuric oxide, Lead dioxide, Lead oxide, Manganese dioxide, Lead sulfide, Gallium + HCl, Ketenes + nitric acid, Iron (II) sulfate + 2-methylpyridine + sulfuric acid, Iron (II) sulfate + nitric acid, + sodium carboxymethylcellulose (when evaporated), Vinyl acetate, trioxane, water + oxygenated compounds (eg: acetaldehyde, acetic acid, acetone, ethanol, formaldehyde, formic acid, methanol, 2-propanol, propionaldehyde), organic compounds. Beware: Many mixtures of hydrogen peroxide and organic materials may not explode upon contact. However, the resulting combination is detonatable either upon catching fire or by impact.

ANOTHER SOURCE OF HYDROGEN PEROXIDE EXPLOSIONS IS FROM SEALING THE MATERIAL IN STRONG CONTAINERS. UNDER SUCH CONDITIONS EVEN GRADUAL DECOMPOSITION OF HYDROGEN PEROXIDE TO WATER + 1/2 OXYGEN CAN CAUSE LARGE PRESSURES TO BUILD UP IN THE CONTAINERS WHICH MAY BURST EXPLOSIVELY.

Special Protective Actions for Firefighters

Specific Methods:

For large fires, flood fire area with water from a distance. DO NOT use combustible materials such as sawdust.

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Dilute with water. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Keep away from combustible material. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep tightly closed in a dry, cool and well-ventilated place. Keep refrigerated. Keep at temperatures between 2 and 8 °C. Do not store near combustible materials. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Incompatible with reducing materials, alkalies, ethers (dioxane, furfuran, tetrahydrofuran), Metals (eg. potassium, sodium lithium, iron, copper, brass, bronze, chromium, zinc, lead, silver, nickel, manganese, platinum, cobalt, iridium, gold, tungsten, osmium, palladium), metal oxides (eg. cobalt oxide, iron oxide, lead oxide, lead hydroxide, manganese oxide), metal salts (eg. calcium permanganate, salts of iron), asbestos, vanadium, molybdeum, triethylamine, palladium, sodium pyrophosphate, carboxylic acids, cyclopentadiene, formic acid, chlorosulfonic acid, carboxylic acids, acetic acid, nitric acid, rust, ketones, sodium carbonate, sodium borate, aniline, mercurous chloride, sodium pyrophosphate, hexavalent chromium compounds, tetrahydrofuran, sodium fluoride, potassium permanganate, urea, manganese dioxide, hydrogen selenide, charcoal, coal, sodium borate, cyclopentadiene, glycerine, cyanides (potassium, cyanide, sodium cyanide), nitrogen compounds

Combustible materials

Organic materials

Acids

Bases

Product code: HY115

Product name: HYDROGEN
PEROXIDE, 35 PERCENT SOLUTION,
FCC

5 / 16

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Water	7732-18-5	None	None	None	None
Hydrogen peroxide	7722-84-1	1 ppm TWA 1.4 mg/m ³ TWA	1 ppm TWA 1.4 mg/m ³ TWA	1 ppm TWA	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Water	7732-18-5	None	None	None	None
Hydrogen peroxide	7722-84-1	1 ppm TWA 1.4 mg/m ³ TWA	1 ppm TWA	1 ppm TWA	1 ppm TWAEV 1.4 mg/m ³ TWAEV

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Water	7732-18-5	None	None
Hydrogen peroxide	7722-84-1	1 ppm TWA 1.4 mg/m ³ TWA	1 ppm TWA 1.5 mg/m ³ TWA 2 ppm STEL 3 mg/m ³ STEL

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Face-shield. or Goggles
- Skin and body protection:** Chemical resistant apron
Long sleeved clothing
Gloves
If working with large quantities:
Chemical resistant protective suit
Boots
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Appearance: No information available.	Color: Clear. Colorless.
Odor: Odorless.	Taste Bitter. Acid.	Formula: H2O2
Molecular/Formula weight (g/mole): 34.01 g/mol	Flammability: No information available	Flashpoint (°C/°F): No information available.
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): -33°C/ -27.4°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F): 108°C/ 226.4°F	Bulk density: No information available	Density (g/cm3): No information available
Specific gravity: 1.1	pH: No information available	Vapor pressure @ 20°C (kPa): 3.1
Evaporation rate: No information available	Vapor density: 1.1	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Easily soluble in cold water Soluble in diethyl ether	

10. STABILITY AND REACTIVITY

Reactivity

Strong oxidizer. Reactive with reducing agent, combustible materials, organic materials, metals, acids, alkalis

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials.

Incompatible Materials: Incompatible with reducing materials, alkalies, ethers (dioxane, furfuran, tetrahydrofuran), Metals (eg. potassium, sodium lithium, iron, copper, brass, bronze, chromium, zinc, lead, silver, nickel, manganese, platinum, cobalt, iridium, gold, tungsten, osmium, palladium), metal oxides (eg. cobalt oxide, iron oxide, lead oxide, lead hydroxide, manganese oxide), metal salts (eg. calcium permanganate, salts of iron), asbestos, vanadium, molybdeum, triethylamine, palladium, sodium pyrophosphate, carboxylic acids, cyclopentadiene, formic acid, chlorosulfonic acid, carboxylic acids, acetic acid, nitric acid, rust, ketones, sodium carbonate, sodium borate, aniline, mercurous chloride, sodium pyrophosphate, hexavalent chromium compounds, tetrahydrofuran, sodium fluoride, potassium permanganate, urea, manganese dioxide, hydrogen selenide, charcoal, coal, sodium borate, cyclopentadiene, glycerine, cyanides (potassium, cyanide, sodium cyanide), nitrogen compounds

Combustible materials
Organic materials
Acids
Bases

Hazardous decomposition products: No information available.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Ingestion. Eyes.

Acute Toxicity

Component Information

Water	
CAS-No.	7732-18-5

LD50/oral/rat = > 90 mL/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Hydrogen peroxide	
CAS-No.	7722-84-1

LD50/oral/rat = 1518 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = 2000 mg/kg Dermal LD50 Rabbit; = 9200 mg/kg Dermal LD50 Rabbit
LD50/dermal/rat = 4060 mg/kg
LC50/inhalation/rat = 2 g/m³ Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

Product code: HY115

Product name: HYDROGEN
PEROXIDE, 35 PERCENT SOLUTION,
FCC

8 / 16

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Corrosive. Contact causes severe skin irritation and possible burns. Absorption into skin may affect behavior/central nervous system (tremor, ataxia, convulsions), respiration (dyspnea, pulmonary emboli), brain.

Eye Contact: Corrosive. Causes severe eye irritation, superficial clouding, corneal edema and may cause burns.

Inhalation May be harmful if inhaled. Causes respiratory tract irritation with coughing, lacrimation. May cause chemical burns to the respiratory tract. May affect behavior/Central nervous system (insomnia, headache, ataxia, nervous tremors with numb extremities) and may cause ulceration of nasal tissue, and , chemical pneumonia, unconsciousness, and possible death. At high concentrations, respiratory effects may include acute lung damage, and delayed pulmonary edema. May affect blood.

Ingestion Harmful if swallowed. Causes gastrointestinal tract irritation with nausea, vomiting, hypermotility, and diarrhea. Causes gastrointestinal tract burns. May affect cardiovascular system and cause vascular collapse and damage. May affect blood (change in leukocyte count, pigmented or nucleated red blood cells). May cause difficulty in swallowing, stomach distension and possible cerebal swelling. May affect behavior/central nervous system (tetany, excitement), and brain.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated exposure of eyes to vapor or mist may cause corneal damage. Prolonged or repeated inhalation may affect metabolism (weight loss). Prolonged or repeated ingestion may affect the liver. Prolonged or repeated inhalation may affect the blood (changes in serum composition).

Sensitization: No information available.

Mutagenic Effects: Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects

Carcinogenic effects: Not classifiable as a human carcinogen. Not classifiable as to its carcinogenicity to humans.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic	Australia - Prohibited Carcinogenic
------------	---------	------	---------------------	-----	------------------------	-------------------------------------	-------------------------------------

						Substances	Substances
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Hydrogen peroxide	7722-84-1	Group 3 -Monograph 71 [1999] Supplement 7 [1987] Monograph 36 [1985]	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as to its carcinogenicity to humans
NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity

No data is available

Reproductive Effects:
Developmental Effects:
Teratogenic Effects:

No information available
No information available
No information available

Specific Target Organ Toxicity

STOT - single exposure
STOT - repeated exposure
Target Organs:

No information available.
No information available.
Blood. Respiratory system. Skin. Eyes. Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:

Aquatic environment.

Hydrogen peroxide - 7722-84-1

Freshwater Algae Data:

2.5 mg/L EC50 Chlorella vulgaris 72 h

Freshwater Fish Species Data:

16.4 mg/L LC50 Pimephales promelas 96 h 1 18 - 56 mg/L LC50 Lepomis macrochirus 96 h static 1 10.0 - 32.0 mg/L LC50 Oncorhynchus mykiss 96 h static 1

Water Flea Data:

18 - 32 mg/L EC50 Daphnia magna 48 h 7.7 mg/L EC50 Daphnia magna 24 h

Persistence and degradability:

No information available

Bioaccumulative potential:

No information available.

Mobility:

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Product code: HY115

Product name: HYDROGEN
PEROXIDE, 35 PERCENT SOLUTION,
FCC

10 / 16

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Water	7732-18-5	None	None	None	None
Hydrogen peroxide	7722-84-1	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Subsidiary Class: 8
Packing group: II
Emergency Response Guide Number: 140
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: A2, A3, A6, B53, IB2, IP5, T7, TP2, TP6, TP24, TP37
Symbol(s): No information available
Description: UN2014, Hydrogen peroxide, aqueous solutions, 5.1, (8), PG II UN2014, Hydrogen peroxide, aqueous solutions, 5.1 (8), II

TDG (Canada)

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
Hazard Class: 5.1
Subsidiary Risk: (8)
Packing Group: II
Marine Pollutant: No Information available
Description: UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1(8), PG II UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

ADR

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
Hazard Class: 5.1
Packing Group: II
Subsidiary Risk: 8
Description: UN2014 Hydrogen peroxide, aqueous solution, 5.1(8), II UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

IMO / IMDG

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
 Hydrogen peroxide, aqueous solutions
Hazard Class: 5.1
Subsidiary Risk: 8
Packing Group: II
Marine Pollutant: No information available
EMS: F-H
Description: UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

RID

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
Hazard Class: 5.1
Subsidiary Risk: 8

Product code: HY115

Product name: HYDROGEN
PEROXIDE, 35 PERCENT SOLUTION,
FCC

11 / 16

Packing Group: II
Description: UN2014 Hydrogen peroxide, aqueous solution, 5.1(8), II UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

ICAO

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
Hazard Class: 5.1
Subsidiary Risk: 8
Packing Group: II
Description: UN2014, Hydrogen peroxide, aqueous solution, 5.1(8), PG II
 UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

IATA

UN-No: UN2014
Proper Shipping Name: Hydrogen peroxide, aqueous solution
Hazard Class: 5.1
Subsidiary Risk: 8
Packing Group: II
ERG Code: 5C
Special Provisions No information available
Description: UN2014, Hydrogen peroxide, aqueous solution, 5.1(8), PG II
 UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Water	7732-18-5	Present ACTIV E	Present KE-35400	Present	Not present	Present	Present	Present 231-791-2
Hydrogen peroxide	7722-84-1	Present ACTIV E	Present KE-20204	Present	Present (1)-419	Present	Present	Present 231-765-0

U.S. Regulations

Hydrogen peroxide

Massachusetts RTK: Present
Massachusetts EHS: extraordinarily hazardous
New Jersey RTK Hazardous Substance List: 1015
New Jersey (EHS) List: 1015 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard Present
Pennsylvania RTK - Environmental Hazard List Present
Michigan PSM HHC: = 7500 lb TQ 52% by weight or greater
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances: 1 lb RQ
California Directors List of Hazardous Substances: Present
FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1366
FDA - Direct Food Additives 21 CFR 173.315, 21 CFR 173.356
FDA - 21 CFR - Total Food Additives 133.113, 133.118, 133.136, 133.144, 133.195, 160.105, 160.145, 160.185, 172.167,
- List Sourced from EAFUS 172.723, 172.814, 172.892, 173.315, 173.356, 173.370, 175.105, 178.1005, 178.1010, 184.1366

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

Product code: HY115

Product name: HYDROGEN PEROXIDE, 35 PERCENT SOLUTION, FCC

12 / 16

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Water	7732-18-5	Not Listed	Not Listed	Not Listed	Not Listed
Hydrogen peroxide	7722-84-1	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Water	7732-18-5	None	None	None	None	None
Hydrogen peroxide	7722-84-1	None	1000 lb TPQ 1000 lb EPCRA RQ	None	None	None

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Water	7732-18-5	Not Applicable	Not Applicable
Hydrogen peroxide	7722-84-1	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component
Water
7732-18-5 (64-70)
Hydrogen peroxide
7722-84-1 (30-36)

WHMIS 2015 Hazard Classification
Not a dangerous product according to HPR classification criteria

Oxidizing liquids - Category 1: H271 May cause fire or explosion, strong oxidizer.; Oxidizing liquids - Category 3: H272 May intensify fire, oxidizer. (9% aqueous solution); Oxidizing liquids - Undefined: (20% aqueous solution; hazard class was established from consulted scientific literature but did not allow to specify hazard category); Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Acute toxicity - Dermal - Category 4: H312 Harmful in contact with skin. (70%); Health Hazard Not Otherwise Classified - Category 1: Causes severe damage to the respiratory tract; Skin corrosion/irritation - Category 1: H314 Causes severe skin burns and eye damage.; Serious Eye Damage/Eye Irritation - Category 1: H318 Causes serious eye damage.; Specific target organ toxicity - Single exposure - Category 3: H335 May cause respiratory irritation. (9% aqueous solution)

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

Components	WHMIS Ingredient Disclosure List -
Hydrogen peroxide	1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Water	7732-18-5	Present	Not Listed
Hydrogen peroxide	7722-84-1	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Water	7732-18-5	Not listed
Hydrogen peroxide	7722-84-1	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Water	7732-18-5	Not listed
Hydrogen peroxide	7722-84-1	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Water	7732-18-5	
Hydrogen peroxide	7722-84-1	<p>Oxidizing liquids - Ox. Liq. 1: H271 May cause fire or explosion, strong oxidizer. (C >= 70 %; Correct classification for physical hazards could not be established); Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed. (Minimum classification); Acute toxicity - Inhalation - Acute Tox. 4: H332 Harmful if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (C >= 70 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)008-003-00-9</p> <p>Oxidizing liquids - Ox. Liq. 1: H271 May cause fire or explosion, strong oxidizer. (C >= 70 %; Correct classification for physical hazards could not be established); Oxidizing liquids - Ox. Liq. 2: H272 May intensify fire, oxidizer. (50 % <= C <70 %; Correct classification for physical hazards could not be established); Skin corrosion/irritation - Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (C >= 70 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Skin corrosion/irritation - Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (50 % <= C <70 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation. (35 % <= C <50 %; Concentration limits for acute</p>

Product code: HY115

Product name: HYDROGEN
PEROXIDE, 35 PERCENT SOLUTION,
FCC

14 / 16

		<p>toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Serious Eye Damage/Eye Irritation - Eye Dam. 1: H318 Causes serious eye damage. (8 % ≤ C < 50 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation. (5 % ≤ C < 8 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given); Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation. (C ≥ 35 %; Concentration limits for acute toxicity cannot be translated into GHS from the DSD especially when minimum classifications are given)008-003-00-9</p>
--	--	---

EU - CLP (1272/2008)

R-phrase(s)

R 8 - Contact with combustible material may cause fire.
R34 - Causes burns.
R22 - Harmful if swallowed.

S -phrase(s)

S28 - After contact with skin, wash immediately with plenty of water
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 1/2 - Keep locked up and out of the reach of children.
S36/39 - Wear suitable protective clothing and eye/face protection.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Water	7732-18-5		No information	
Hydrogen peroxide	7722-84-1	Xn; R20/22 C; R35 R5 O; R8	20% ≤ C C; R34 5% ≤ C < 20% Xi; R36/38	S: (1/2)-7-26-28-36/37/39 -45

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive.
O - Oxidising.



16. OTHER INFORMATION

Preparation Date: 05/08/2015
Revision Date: 10/24/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet