SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Common Name: **HYDROGEN PEROXIDE 35% (ALL GRADES)**
Chemical Name: **HYDROGEN PEROXIDE**
Last Revision Date: 05/2023

Manufacturer's Name & Address
Roberts Chemical Co., Inc.
330-B Victor Road
Attleboro, MA 02703
TEL: 508-409-0220
FAX: 508-222-2752
www.robertschem.com

Emergency Telephone Number:
CHEMTREC **24-HourToll Free** (800) 424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Label elements, including precautionary statements

Pictorgram:

Signal Word: **Warning**

Hazard Statement(s)

H302 Harmful if swallowed
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Precautionary Statement(s)

P210 Keep away from Heat.
P220 Keep/Store away from clothing/combustible materials.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P501 Dispose of contents/ containter to an approved waste disposal plant.

SECTION 3: COMPOSTION/ INFORMATION ON INGREDIENTS

PRODUCT	CAS#	% BY WEIGHT
HYDROGEN PEROXIDE SOLUTION	7722-84-1	35

SECTION 4: FIRST-AID MEASURES

INHALATION: Remove individual to fresh air. If breathing difficulty or discomfort occurs and persists, **obtain medical attention immediately.**

SKIN CONTACT: Wash with plenty of mild soap and water. Remove contaminated clothing and launder before reuse. If irritation occurs or persists, **obtain medical attention immediately.**

EYE CONTACT: Flush for at least 15 minutes with clean water, lifting upper and lower eyelids to ensure complete removal of solution. If irritation occurs or persists, **obtain medical attention immediately.**

INGESTION: Rinse mouth with water. Dilute by drinking 1 or 2 glasses of water. Do not induce vomiting. Never give anything to an unconscious person. **Obtain medical assistance immediately.**

SECTION 5: FIRE-FIGHTING MEASURES

Fire extinguishing media: flood with water.

Flammable limits: non-combustible.

Special fire-fighting procedures: Any tank or container surrounded by fire should be flooded with water. Wear full protective clothing and use self-contained or air supplied breathing apparatus.

Unusual fire & explosion hazards: does not burn or support combustion.

Products evolved when subject to heat or combustion: no data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Dispose according to methods outlined for waste disposal.

Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

SECTION 7: HANDLING AND STORAGE

HANDLING: Wear chemical splash-type mono-goggles and full-face shield, impervious clothing such as rubber, PVC, etc., and rubber or neoprene gloves and shoes. Avoid cotton, wool or leather. Avoid excessive heat and contamination. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner (refer to technical data sheet). Never return unused hydrogen peroxide to original container, empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic.

STORAGE: Store drums in cool areas out of direct sunlight and away from combustibles. For bulk storage refer to the technical data sheet.

COMMENTS: VENTILATION: Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into the work environment.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: If concentrations more than 10ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA), or other approved atmospheric-supplied respirator (ASR) equipment, such as a full-face airline respirator (ALR). DO NOT use any form of air purifying respirator or filtering face piece (dust mask), especially those containing oxidizable sorbents such as activated carbon.

Ventilation: Should be provided to minimize the release of hydrogen peroxide vapors and mists into the work environment. Spills should be minimized or confined immediately to prevent release into the work area. Remove contaminated clothing immediately and wash before reuse.
Protective Gloves: Wear liquid proof rubber or neoprene gloves. Rinse thoroughly with water prior to removal. Inspect regularly for leaks.
Eye Protection: Use chemical splash guard mono-goggles or safety glasses with side shields, or safety goggles, if airborne mist or splashing is expected.
Other Protective Clothing: Rubber or neoprene footwear (avoid leather). Impervious clothing materials such as rubber, neoprene, nitrile, or polyvinyl chloride (avoid cotton, wool and leather). Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on material such as paper, fabric, cotton, leather, wood, or other combustibles can cause the material to ignite and result in fire.
Work Practices: Skin that becomes contaminated with this substance should be immediately washed or showered with soap.
Hygienic Practices: Eating, drinking, or smoking should not be permitted in areas where any chemical substances are handled, processed, or stored. Employees who handle these materials should wash their hands thoroughly with soap and water before eating, drinking, smoking, or using toilet facilities.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid. **Appearance:** *clear, colorless liquid* **Odor:** *odorless* **pH:** approximately 2.0-4.0 **Boiling point:** 230°F (110° C) **Flash point:** not available **Evaporation rate:** not available	**Vapor Pressure:** ca.20 hPa @ 20° C **Vapor Density:** not available **Volatility:** 100% **Soluble in water:** 100% @ 20°C **Specific Gravity:** 1.13 @ 20°C/4°C **Molecular Weight:** not available

SECTION 10: STABILITY AND REACTIVITY

Stability: stable (contamination can cause decomposition).
Conditions to avoid: excessive heat or contamination could cause product to become unstable.
Materials to avoid: dirt, organics and combustibles.
Incompatibility (materials to avoid): reducing agents, iron and other heavy metals, galvanized iron, copper alloys and caustic.
Hazardous polymerization: will not occur.
Hazardous decomposition products: Oxygen which supports combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Likely route of exposure
Inhalation, Eye contact, Skin contact

Target Organs
Eyes

Skin
Lungs
Gastro-intestinal system
head
Respiratory organs

Acute oral toxicity
absorption
Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
LD50 Rat: 1,193 - 1,270 mg/kg (IUCLID)

SECTION 12: ECOLOGICAL INFORMATION

Eco-toxicity: Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Degrades in the atmosphere within the light spectrum with hydroxyl radicals in the gas phase and subsequent photolysis.
Reference ECETOC Joint Assessment of Commodity Chemicals No.22, Hydrogen Peroxide. ISSN-0773-6339. January 1993

SECTION 13: DISPOSAL CONSIDERATIONS

Ecotoxicity:
Toxicity to algae
IC50 Chlorella vulgaris (Fresh water algae): 2.5 mg/l; 72 h
OECD Test Guideline 201

Persistence and degradability:
Biodegradability
Readily biodegradable.

Bio accumulative potential:
No information available.

Mobility in soil:
No information available.
Additional ecological information
No interference with wastewater treatment plants are to be expected when used properly.
Discharge into the environment must be avoided.

SECTION 14: TRANSPORTATION INFORMATION

Land transport (DOT)
UN number: UN 2014
Proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class: 5.1 (8)
Packing group: II
Environmentally hazardous: --

Air transport (IATA)
UN number: UN 2014
Proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class: 5.1 (8)
Packing group: II
Environmentally hazardous: --
Special precautions for user*:* yes
Not permitted for transport.

Sea transport (IMDG)
UN number: UN 2014
Proper shipping name*: HYDROGEN PEROXIDE, AQUEOUS SOLUTION*
Class: *5.1 (8)*
Packing group*: II*
Environmentally hazardous*:* --
Special precautions for user*:* yes
EmS F-H S-Q

SECTION 15: REGULATORY INFORMATION

United States of America

SARA 313
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.

SARA 302
The following components are subject to reporting levels established by SARA Title III, Section 302:
Ingredients:
hydrogen peroxide 7722-84-1

Clean Water Act
The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:
Ingredients: phosphoric acid
The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:
Ingredients: phosphoric acid

US State Regulations

Massachusetts Right To Know
Ingredients:
hydrogen peroxide

Pennsylvania Right To Know
Ingredients:
hydrogen peroxide

New Jersey Right To Know
Ingredients:
hydrogen peroxide

California Prop 65 Components
This product does not contain any chemicals known to the State of California to cause cancer,birth, or any other reproductive defects.

Notification status
TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16: OTHER INFORMATION

Hazard Statements:
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
Precautionary Statements:
Prevention
P280 Wear eye protection.
Response
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/ attention.

All information, recommendations and suggestions appearing herein concerning this product are based upon data believed to be reliable; however, it is the user's responsibility to determine the safe handling and suitability for the use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by **Roberts Chemical Co., Inc.** as to the effects of such use, the results obtained, or the safety and toxicity of the product, nor does **Roberts Chemical Co., Inc.** assume any liability arising out of use, by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete since more information may be desirable or necessary when particular or exceptional conditions or circumstances exist, or because of applicable laws or government regulations.