



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HYDROGEN PEROXIDE 35%
CHEMICAL NAME/
CLASS/SYNONYMS: None
PRODUCT NUMBER: HYDROGEN PEROXIDE 35%
UN/NA NUMBER: 2014
CHEMICAL FAMILY: Oxidizer
CAS NUMBER: Not applicable for mixtures.
FORMULA: H₂O₂

COMPANY: **JMN Specialties, Inc.**
1100 Victory Drive – Westwego, Louisiana USA 70094
Phone (504) 341-3749, Fax (504) 341-5868
www.jmnspecialties.com
EMERGENCY PHONE: CALL CHEMTEL: Toll Free US & Canada: (800) 255-3924, Outside
USA +01-813-248-0585. Contract #: MIS0002833.
DATE PREPARED: October 8, 2015

2 – HAZARDS IDENTIFICATION

GHS HAZARD CLASSIFICATION:

Physical Hazards

Flammable Liquids:..... . No hazard statement

Health Hazards

Acute Toxicity (Oral): Category 4 - Harmful if swallowed, in contact with skin, inhaled

Skin Corrosion/Irritation: Category 1B - Causes severe skin burns and eye damage

Serious Eye Damage/Irritation: Category 1 - Causes severe eye damage

Aspiration Hazard:..... . Category 1B - Respiratory sensitizer

WARNING LABEL ITEMS INCLUDING PRECAUTIONARY STATEMENTS:

Pictograms:



SIGNAL WORD:..... DANGER!

GHS HAZARD AND PRECAUTIONARY STATEMENTS:

H271: May cause fire or explosion; strong oxidizer

H302 H312 H332: Harmful if swallowed, in contact with skin or if inhaled

H314: Causes severe skin burns and eye damage

H333: May be harmful if inhaled

H335: May cause respiratory irritation

H402: Harmful to aquatic life

P101+P102+P103: If medical advice is needed, have product container or label at hand. Keep out of the reach of children. Read label before use.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

P202+270+280+281: Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

P220: Keep/Store away from clothing/combustible materials

P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations.

Characterization and compliance with applicable laws are the responsibility solely of the generator.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

TOTAL VOC's: Hydrogen Peroxide products have not shown the presence of any volatile organic compounds as determined by U.S. Environmental Protection Agency Method 24.

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER
Hydrogen Peroxide	35	7722-84-1
Deionized Water	65	7732-18-5

4 – FIRST-AID MEASURES

BREATHING (INHALATION): Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen.

SWALLOWING (INGESTION): Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical attention immediately.

EYES: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

SKIN (DERMAL):..... Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

NOTE TO PHYSICIAN: Pulmonary edema may be delayed for 24 to 72 hours; keep under observation. Gastric lavage may be necessary if swallowed. Analysis of body fluids (particularly gastric aspirates) using the titanium chloride reaction, if done immediately, will reveal peroxides.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

5 – FIRE-FIGHTING MEASURES

GENERAL FIRE HAZARDS: Product components will burn producing oxygen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapor or products of combustion. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire. Keep containers cool with water spray.

AUTOIGNITION TEMP: None - Water based material

EXTINGUISHING MEDIA: Determined by surrounding material. In case of fire, use water fog, dry chemical, CO₂, or "alcohol" foam.

SPECIAL FIRE FIGHTING UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers may explode from internal pressure if confined to fire. Cool with water spray.

6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: Causes fires with organic material. Ventilate area of leak or spill. Wear appropriate personal protective equipment. Contain and recover liquid when possible. Do not return spilled material to original container. Larger Spills: Dilute with a large amount of water and hold in a pond or dyked area until the peroxide decomposes followed by discharge into a suitable treatment system. May be neutralized with sodium metabisulfite or sodium sulfite after diluting to 5-10% peroxide. Do not flush undiluted material to sewer. This oxidizing material can increase the flammability of adjacent combustible materials. Empty containers should be rinsed with water before discarding.

WASTE DISPOSAL: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA STATUS: If discarded in its purchased form, it is not a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

7 – HANDLING and STORAGE

STORAGE: Keep in a tightly closed container, stored in a cool, dry, ventilated area below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be washed out or used for other purposes.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

HANDLING:..... Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

HAZARDOUS INGREDIENT	PEL	TLV-TWA
Hydrogen Peroxide	1 ppm	1 ppm
Deionized Water	None Established	None Established



EXPOSURE CONTROLS:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

RESPIRATORY PROTECTION: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

PROTECTIVE CLOTHING:

Eye/face protection: Wear chemical goggles; face shield (if splashing is possible). **Skin protection:** Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron or chemical suit and chemical resistant boots are recommended.

ADDITIONAL MEASURES:

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

9 – PHYSICAL / CHEMICAL PROPERTIES

BOILING POINT: 226°F (108°C)
FREEZING POINT: -27°F (-33°C)
FLASHPOINT:..... No Data Available
UPPER FLAME LIMIT (%): NA
LOWER FLAME LIMIT (%): ... NA
VAPOR PRESSURE: 24 mmHg @ 68°F (20°C)
VAPOR DENSITY (AIR=1):..... 1
SPECIFIC GRAVITY: 1.214 to 1.215 (Water = 1)
pH: 3.3
SOLUBILITY IN WATER:..... Complete
VOLATILITY
INCLUDING WATER: 9.50 pounds per gallon
MOLECULAR WEIGHT: 34.01 g/mol (for Hydrogen Peroxide)
EVAPORATION RATE:..... < 1
PHYSICAL STATE: Liquid
COLOR: Clear
ODOR:..... Slight acid odor

10 – STABILITY and REACTIVITY

STABILITY: Stable
HAZARDOUS DECOMP.: Will not occur
INCOMPATIBILITY: Strong oxidizing agents, strong reducing agents, acetic acid, acetic anhydride, alcohols, brass, copper, copper alloys, finely powdered metals, galvanized iron, hydrazine, iron, magnesium, nitric acid, sodium carbonate, potassium permanganate, cyanides (e.g. potassium cyanide, sodium cyanide), ethers (e.g. dioxane, furfuran, tetrahydrofuran (THF)), urea, chlorosulfonic acid, alkalies, lead, nitrogen compounds, triethylamine, silver, nickel, palladium, organic matter, charcoal, sodium borate, aniline, platinum, formic acid, cyclopentadiene, activated carbon, tert-butyl alcohol, hydrogen selenide, manganese dioxide, mercurous chloride, rust, ketones, carboxylic acids, glycerine, sodium fluoride, sodium pyrophosphate, soluble fuels (acetone, ethanol, glycerol), wood, wood, asbestos, hexavalent chromium compounds, salts of iron, copper, chromium, vanadium, tungsten, molybdenum, and platinum.
HAZARDOUS REACTIONS: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

11 – TOXICOLOGICAL INFORMATION

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

THRESHOLD LIMIT VALUE:... 1 ppm



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

OSHA PEL:..... 1 ppm

LISTED CARCINOGEN: This product IS NOT listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.

MEDICAL CONDITION

AGGRAVATED: Existing dermatitis.

INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

ORAL

Product:..... If ingested, sudden evolution of oxygen may cause injury by distention of stomach and may cause perforation of the gastro-intestinal tract and internal bleeding.

DERMAL

Product:..... Prolonged or repeated skin contact may cause mild to severe irritation. Skin contact may aggravate existing dermatitis.

INHALATION

Product:..... Respiratory tract irritant. High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, possibly with chest pain and coughing.

REPEATED DOSE TOXICITY

Product:..... Based on the available test data, product does not cause adverse genetic effects.

SKIN CORROSION / IRRITATION

Product:..... Repeated and prolonged exposure to concentrated material may cause dermatitis.

SERIOUS EYE DAMAGE / IRRITATION

Product:..... Eye contact with product will cause severe irritation, chemical burns, and serious eye damage.

RESPIRATORY OR SKIN SENSITIZATION

Product:..... Hydrogen peroxide is not considered to cause skin sensitisation.

MUTAGENICITY

IN VITRO

Product:..... No Data Available

IN VIVO

Product:..... No Data Available

Specified Substance(s)

Information as provided by manufacturer

Hydrogen Peroxide

No Data Available

CARCINOGENICITY

Product:..... IARC: 3-Group 3: Not classifiable as to its carcinogenicity to humans (hydrogen peroxide). ACGIH: A3: Confirmed animal carcinogen with unknown relevance to humans. NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY

Product:..... Based on available data the classification criteria are not met. Not classified as hazardous.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Product: **Inhalation:** Vapors are corrosive and irritating to the respiratory tract. Inhalation of mist may burn the mucous membrane of the nose and throat. In severe cases, exposures may result in pulmonary edema and death. **Ingestion:** Corrosive and irritating to the mouth, throat, and abdomen. Large doses may cause symptoms of abdominal pain, vomiting, and diarrhea as well as blistering or tissue destruction. Stomach distention (due to rapid liberation of oxygen), and risk of stomach perforation, convulsions, pulmonary edema, coma, possible cerebral edema (fluid on the brain), and death are possible. **Skin Contact:** Corrosive. Symptoms of redness, pain, and severe burn can occur. **Eye Contact:** Vapors are very corrosive and irritating to the eyes. Symptoms include pain, redness and blurred vision. Splashes can cause permanent tissue destruction. **Chronic Exposure:** No information found. **Aggravation of Pre-existing Conditions:** Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

Product:..... The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin, and respiratory conditions.

ASPIRATION HAZARD

Product:..... Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.

OTHER ADVERSE EFFECTS

Product:..... Acute toxicity Oral: Practically nontoxic. (rat) LD50 >5000 mg/kg (10%). Slightly toxic. (rat) LD50 = 1200 mg/kg(35%). Dermal: Slightly toxic. (rat) LD50 >2000 mg/kg (35%). Skin Irritation: Non-irritating. (rabbit) (10%) Non-irritating. (rabbit) (35%). Eye Irritation: Corrosive. (rabbit) (10%) Corrosive. (rabbit) (35%).

12 – ECOLOGICAL INFORMATION

ACUTE TOXICITY

FISH

Product: LC₅₀ , 96 HRS , FISH mg /l: 16.4 mg/l (Pimephales promelas)

AQUATIC INVERTEBRATES

Product: EC₅₀, 48 HRS , DAPHNIA, mg/l : 2.4 mg/l (Daphnia pulex)

CHRONIC TOXICITY

FISH

Product:..... Not determined. Keep product out of sewers and waterways.

AQUATIC INVERTEBRATES

Product:..... Not determined. Keep product out of sewers and waterways.

TOXICITY TO AQUATIC PLANTS

Product: Acute EC₅₀ 1.38 mg/l Aquatic plants 72 hours.

PERSISTENCE AND DEGRADABILITY

BIODEGRADATION

Product:..... This product is considered to be biodegradable.

BIOLOGICAL OXYGEN DEMAND

Product:..... No data available

CHEMICAL OXYGEN DEMAND

Product:..... No data available



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

BOD / COD RATIO

Product:..... No data available

BIOACCUMULATIVE POTENTIAL

Product:..... Potential to bioaccumulate is low.

MOBILITY IN SOIL

Product:..... Expected to partition to water.

RESULTS OF PBT AND mPvB ASSESSMENT

Product:..... Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bioaccumulative) criteria.

OTHER ADVERSE EFFECTS

Product: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13 –DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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14 – TRANSPORTATION INFORMATION

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.



UN/NA NUMBER: 2014

PROPER SHIPPING NAME: Hydrogen peroxide, aqueous solutions

HAZARD CLASS:..... 5.1 (8)

PACKAGING GROUP :..... None

LETTER:..... O (Oxidizing agents), C (Corrosive substances)

ENVIRONMENTAL HAZARD: Because of modern treatment methods or method of use of this product, only an insignificant amount of the ingredients reaches the environment. That amount is at such levels as to typically not cause any adverse effects.

REPORTABLE QUANTITY: 750 pounds, based on Hydrogen Peroxide / CAS# 7722-84-1 in blend.



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

15 - REGULATIONS

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. This SDS complies with 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD). **IMPORTANT:** Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

EPA SRA Title III Chemical Listings:

TSCA STATUS:..... This product is listed on the TSCA inventory. If this product is a blend, all ingredients in the product are listed on the TSCA Inventory List.
Any impurities present in this product are exempt from listing.

SECTION 302:..... No listed substance

SECTION 304:..... No listed substance

SECTION 312:..... Yes

SARA SECTION 313:..... No listed substance

ACUTE:..... Yes (Eyes)

CHRONIC:..... No

FIRE:..... No

PRESSURE:..... No

REACTIVE:..... No

CLEAN WATER ACT:..... None

IMDG – International Marine Dangerous Goods Code

UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), PG II. EmS F-H, S-Q. Marine Pollutant: NO.

IATA

UN2014, Hydrogen peroxide, aqueous solutions 5.1, (8), PG II.

DEA Chemical Trafficking Act:.. No



Safety Data Sheet (HYDROGEN PEROXIDE 35%)

16 – OTHER INFORMATION

HMIS*

HEALTH		3
FLAMMABILITY		0
REACTIVITY		0
PERSONAL PROTECTION		D

***HMIS®HAZARD INDEX: 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard.**

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS and product label must be considered.

ND = No Data, NA = Not Applicable/Not Available, ≤ = Less than or equal to, ≥ = Greater than or equal to

REVISION STATEMENT: Changes have been made throughout this Safety Data Sheet (SDS). Please read the entire document. Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) by the Company Health and Risk Assessment Unit.

DISCLAIMER:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this Safety Data Sheet (SDS) will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal and State Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.**

This is the last page of this SDS