

SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Hydrogen Peroxide, 30%

Product No.: 2190-03, 2190-23, 2190-14

Manufacturer:

Avantor Performance Materials, Inc.
3477 Corporate Parkway, Suite 200
Center Valley, PA 18034
U.S.A.

Telephone:

Customer Service: 855-282-6867

Contact Person: Environmental Health & Safety

e-mail: info@avantormaterials.com

Emergency telephone:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2 HAZARDS IDENTIFICATION

Emergency Overview:

Appearance:

Color: Colorless
Form : Liquid
Odor: Mild pungent

Signal words DANGER!

Potential Health Effects:

General Corrosive. Causes skin and eye burns. Causes digestive tract burns. Harmful by inhalation and if swallowed. Mist or vapor extremely irritating to eyes and respiratory tract. Prolonged exposure may cause chronic effects.

Potential Physical / Chemical Effects:

Oxidizing material. Contact with combustible material may cause fire.

Inhalation:

Harmful if inhaled. Causes burns. Vapors irritate the respiratory system, and may cause coughing and difficulties in breathing.

Skin:

Corrosive. Causes skin burns.

Eye:

Corrosive. Causes eye burns. Vapor or spray may cause eye damage, impaired sight or blindness.

Ingestion:

Corrosive. May cause burns of the gastrointestinal tract if swallowed.

Chronic Effects:

Strongly irritating. Prolonged contact may cause burns. Contains a substance which may have a mutagenic effect.

Routes of Exposure:

Skin and/or eye contact., Inhalation, Ingestion

Target Organs:

Lungs

OSHA Regulatory Status

This product is hazardous according to OSHA 29CFR 1910.1200.

Environment:

Toxic to aquatic life.

3 COMPOSITION / INFORMATION ON INGREDIENTS

General information:

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
HYDROGEN PEROXIDE	7722-84-1	25 - 35%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4 FIRST AID MEASURES

- General:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
- Inhalation:** Move to fresh air. Call a physician or poison control center immediately. If breathing is difficult, give oxygen. Apply artificial respiration if victim is not breathing
- Skin contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention immediately.
- Ingestion:** Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- Notes to the physician:**
Treatment: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

- Extinguishing media:** The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media:** None known.
- Unusual Fire & Explosion Hazards:** Strong oxidizer. Contact with combustible material may cause fire. Pressurized container may explode when exposed to heat or flame.
- Special Fire Fighting Procedures:** Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.
- Protective Measures:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Environmental precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
- Spill Cleanup Methods:** Eliminate all ignition sources if safe to do so. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.
- Notification Procedures:** Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

7 HANDLING AND STORAGE

- Handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing. Keep away from combustible material. Do not taste or swallow. Do not eat, drink or smoke when using the product. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.
- Storage:** Keep away from heat. Keep away from sources of ignition - No smoking. Keep away from combustible material. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Chemical name	Type	Exposure Limit values	Source
HYDROGEN PEROXIDE	TWA	1 ppm	US. ACGIH Threshold Limit Values (2011)
HYDROGEN PEROXIDE	PEL	1 ppm 1.4 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1 ppm 1.4 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

- Protective Measures:** 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. An eye wash and safety shower must be available in the immediate work area.
- Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Chemical respirator with acid gas cartridge.
- Eye protection:** Wear safety glasses with side shields (or goggles) and a face shield.

Skin and Body Protection:	Wear appropriate clothing to prevent reasonably probable skin contact.
Hygiene measures:	Provide eyewash station and safety shower. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Avoid contact with eyes, skin, and clothing.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Mild pungent
Odor Threshold:	No data available.
pH:	3.3
Freezing point:	-25 °C
Boiling Point:	108 °C
Flash Point:	Not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)-:	No data available.
Flammability Limit - Lower (%)-:	No data available.
Vapor pressure:	33.3 hPa
Vapor density (air=1):	No data available.
Relative density:	1.11
Solubility(ies)	
Solubility in Water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

10 STABILITY AND REACTIVITY

Stability:	Stable; however, may decompose if heated.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat. Light. Contact with combustibles. Contact with incompatible materials.
Incompatible materials:	Organic compounds. Reducing agents. Flammable/combustible material.
Hazardous decomposition products:	May decompose upon heating to produce corrosive and/or toxic fumes.

11 TOXICOLOGICAL INFORMATION

Product:

Acute Toxicity (Oral): No data available.

Inhalation: May cause irritation to the respiratory system.

Ingestion: May cause burns of the gastrointestinal tract if swallowed.

Skin corrosion/irritation: Causes severe skin burns.

Serious eye damage/eye irritation: Causes serious eye damage.

Respiratory sensitizer/Skin sensitizer: Not a skin sensitizer.

Carcinogenicity: Suspected of causing cancer.

Mutagenesis: May cause genetic defects.

Reproductive toxicity: No components toxic to reproduction

Other Effects: None known.

12 ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic life.

Product:

Chronic Toxicity(Fish): No data available.

Acute toxicity(Aquatic invertebrates): No data available.

Chronic Toxicity(Aquatic invertebrates): No data available.

Acute toxicity(Aquatic plants): No data available.

Specified substance(s):

Acute toxicity(Fish):

Name

HYDROGEN PEROXIDE

Test results

LC 50 (Chameleon goby (Tridentiger trigonocephalus), 24 h): 155 mg/l Mortality
LC 50 (Jack Mackerel (Trachurus japonicus), 24 h): 89 mg/l Mortality

Persistence and degradability: Expected to be readily biodegradable.

Bioaccumulative potential: No data available on bioaccumulation.

Mobility: The product is water soluble and may spread in water systems.

13 DISPOSAL CONSIDERATIONS

Disposal Methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

14 TRANSPORT INFORMATION

DOT

UN number: UN 2014
 Proper Shipping Name: Hydrogen peroxide, aqueous solutions
 Transport hazard class(es): 5.1
 Subsidiary risk label: –
 Packing group: II
 Label(s): 5.1, 8
 Marine Pollutant

IMDG - International Maritime Dangerous Goods Code

UN number: UN 2014
 UN proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
 Transport hazard class(es): 5.1
 Subsidiary risk label: –
 Packing group: II
 Label(s): 5.1, 8
 Marine Pollutant:
 EmS No.: F-H; S-Q

IATA

UN number: UN 2014
 Proper Shipping Name: Hydrogen peroxide, aqueous solution
 Transport hazard class(es): 5.1
 Subsidiary risk label: –
 Packing group: II
 Label(s): 5.1, 8

15 REGULATORY INFORMATION

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EU EINECS List:	On or in compliance with the inventory
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	On or in compliance with the inventory
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Switzerland Consolidated Inventory:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	On or in compliance with the inventory

US Regulations

- **CERCLA Hazardous Substance List (40 CFR 302.4):**
- **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):**
None

- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**
None

SARA Title III

- **Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

Chemical name	RQ	Threshold Planning Quantity
HYDROGEN PEROXIDE	1000 lbs.	1000 lbs.
Chemical name	RQ	Threshold Planning Quantity
HYDROGEN PEROXIDE	1000 lbs.	1000 lbs.

- **Section 311/312 (40 CFR 370):**

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

- **Section 313 Toxic Release Inventory (40 CFR 372):**

None present or none present in regulated quantities.

State Regulations

- **California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**

No ingredient regulated by CA Prop 65 present.

- **Massachusetts Right-To-Know List:**

HYDROGEN PEROXIDE Listed

- **New Jersey Right-To-Know List:**

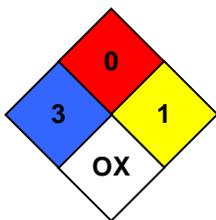
WATER Listed
HYDROGEN PEROXIDE Listed

- **Pennsylvania Right-To-Know List:**

WATER Listed
HYDROGEN PEROXIDE Listed

16 OTHER INFORMATION

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe
OX: Oxidizer

Revision Information:

Issue Date: 03-21-2013

SDS No:

Disclaimer:

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