

MATERIAL SAFETY DATA SHEET



Hydrogen Peroxide Solution, 3% w/w

SECTION 1 . Product and Company Identification

Product Name and Synonym: Hydrogen Peroxide Solution, 3% w/w

Product Code: BDH6237

Material Uses:

Manufacturer: VWR International, LLC
100 Matsonford Road
Radnor, PA 19087
(800) 256-2586

Entry Date : 9/26/2012

Print Date: 9/26/2012

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	0			
Flammability:	0			
Reactivity:	0			
Hazard Rating:				
Least	Slight	Moderate	High	Extreme
0	1	2	3	4
NA=Not Applicable		NE=Not Established		

SECTION 2 HAZARD IDENTIFICATION

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

Physical state: Liquid.

Odor: Odorless.

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview: WARNING!

HARMFUL IF SWALLOWED.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.
MAY CAUSE EYE AND SKIN IRRITATION.
CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:
MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA, NOSE,
SINUSES.
WEAK OXIDIZER.
CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.
MAY BE HARMFUL IF INHALED.

Do not ingest. Avoid prolonged contact with eyes, skin and clothing. Store in tightly-closed container. Avoid contact with combustible materials. Wash thoroughly after handling.

Routes of entry: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes: Moderately irritating to eyes.

Skin: Harmful in contact with skin. Moderately irritating to the skin.

Inhalation: May be harmful if inhaled.

Ingestion: Harmful if ingested.

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

Hydrogen Peroxide Solution, 3% w/w

Teratogenicity/Reproductive toxicity: No known significant effects or critical hazards.

Medical conditions aggravated by over-exposure: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11)

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Hydrogen Peroxide 35%	CAS# 7722-84-1	8 - 9%	W/W	OSHA TWA 1 ppm (1.4 mg/m ³)
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	W/W	None Established

SECTION 4 FIRST AID MEASURES

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Seek medical assistance immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type:	Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards:	Oxidizer. Contact with combustible materials may cause a fire.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a nonsparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in a appropriate container for disposal.

Hydrogen Peroxide Solution, 3% w/w

SECTION 7 HANDLING AND STORAGE

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required

Ventilation

Local Exhaust

Mechanical

Protective Gloves: Gloves to prevent skin exposure as rubber or vinyl

Eye Protection: Splash Goggles

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

PRODUCT NAME - UNITED STATES

Hydrogen Peroxide

EXPOSURE LIMITS

ACGIH TLV (United States, 1/2007).

TWA: 1 ppm 8 hour/hours.

NIOSH REL (United States, 12/2001).

TWA: 1 ppm 10 hour/hours.

OSHA PEL (United States, 11/2006).

TWA: 1 ppm 8 hour/hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 1 ppm 8 hour/hours.

ACGIH TLV (United States, 1/2007).

TWA: 1.4 mg/m³ 8 hour/hours.

NIOSH REL (United States, 12/2001).

TWA 1.4 mg/m³ 10 hour/hours.

OSHA PEL (United States, 12/2006).

TWA 1.4 mg/m³ 8 hour/hours.

OSHA PEL 1989 (United States, 3/1989).

TWA 1.4 mg/m³ 8 hour/hours.

Consult local authorities for acceptable exposure limits.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

PERSONAL PROTECTION

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to

Hydrogen Peroxide Solution, 3% w/w

liquid splashes, mists, gases or dusts.
Recommended: splash goggles

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Body: Recommended: lab coat and gloves

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	~0° C	Percent Volatile by Volume:	>99%
Boiling Point:	~100° C	Evaporation Rate	not available
Vapor Pressure:	not available	Evaporation Standard	
Vapor Density:	not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Colorless, odorless liquid	Upper Flamm. Limit in Air	Not applicable
Flash Point:	not flammable		
Specific Gravity:	~1.0		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Temperature extremes, heat, light
Materials to Avoid:	Flammables, combustibles, Cyanides, Acids, permanganates, Reducing agents
Hazardous Decomposition Products:	Hydrogen, Oxygen
Hazardous polymerization:	not expected to occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Toxicity data - United States

Product/Ingredient name: Hydrogen Peroxide

Hydrogen Peroxide Solution, 3% w/w

Test	Result	Route	Species
LD50	376 mg/kg	Oral	Rat
LD50	910 mg/kg	Oral	Rat
LD50	1518 mg/kg	Oral	Rat
LD50	4060 mg/kg	Dermal	Rat
LD50	1072 mg/kg	Dermal	Mouse
LDLo	1429 mg/kg	Oral	Man
LDLo	8500 mg/kg	Oral	Child
LDLo	500 mg/kg	Dermal	Rabbit

Chronic effects on humans: CARCINOGENIC EFFECTS Classified A3 (Proven for animals.) by ACGIH [Hydrogen Peroxide]. Classified 3 (Not classifiable for humans.) by IARC [Hydrogen Peroxide]. Contains material which may cause damage to the following organs: mucous membranes, upper respiratory tract, skin, eye, lens or cornea, nose/sinuses.

Other toxic effects on humans: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

Consult local authorities for acceptable exposure limits.

Engineering measures: No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

SECTION 12 Ecological Information

Ecotoxicity data - United States

Product/Ingredient name: Hydrogen Peroxide

Species	Period	Result
Daphnia magna (EC50)	48 hour/hours	24 mg/l
Oncorhynchus mykiss (LC50)	96 hour/hours	22 mg/l
Lepomis macrochirus (LC50)	96 hour/hours	26.7 mg/l

Environmental precautions: No known significant effects or critical hazards.

Toxicity of the products of biodegradation: The products of degradation are less toxic than the product itself.

SECTION 13 Disposal Considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 14 Transport Information

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

United States

HCS Classification: Oxidizing material

Hydrogen Peroxide Solution, 3% w/w

Toxic material
Irritating material
Target organ effects

U.S. Federal regulations: TSCA 8 (b) inventory: Listed

SARA 302/304/311/312 extremely hazardous substances: HYDROGEN PEROXIDE30%

SARA 302/304 emergency planning and notification: HYDROGEN PEROXIDE30%

SARA 302/304/311/312 hazardous chemicals: HYDROGEN PEROXIDE30%;

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulation: Pennsylvania RTK: Hydrogen Peroxide: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Hydrogen Peroxide;

New Jersey: Hydrogen Peroxide 3%

Canada

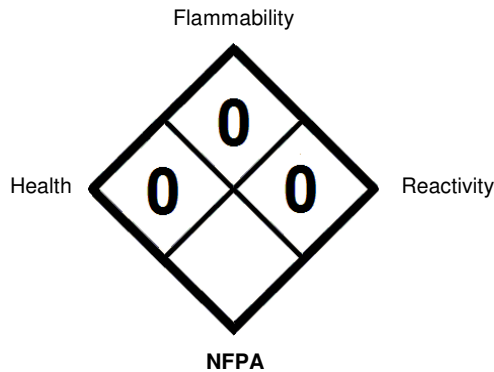
WHMIS (Canada): Class C: Oxidizing material.

Class D-2B: Material causing other toxic effects (Toxic).

CEPA DSL/CEPA NDSL: CEPA DSL: Hydrogen Peroxide; Water

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information require by the CPR.

SECTION 16 Additional Information



Revisions

7/20/2010	0	Review date for MSDS. STN
9/26/2012	0.1	Review date for MSDS LS

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.