## MATERIAL SAFETY DATA SHEET



# Hydrogen Peroxide 30% w/w

# SECTION 1 . Product and Company Idenfication

Product Name and Synonym: Hydrogen Peroxide 30% w/w

Product Code: BDH3742

Material Uses:

WR International, LLC

100 Matsonford Road

Suite 200

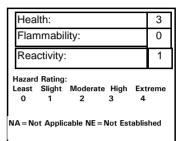
Radnor, PA 19087

(800) 256-2586

Entry Date : 8/5/2013
Print Date: 8/5/2013

24 Hour Emergency Assistance : Chemtrec 800-424-9300

Canutec 613-996-6666



#### **SECTION 2 HAZARD IDENTIFICATION**

Heat, shock, friction, or contact with other materials may cause fire or explosion. Harmful if swallowed. Avoid breathing vapor or dust. Use adequate ventilation. Avoid contact with eyes, skin or clothes. Wash thoroughly after handling. Keep closed.

Physical state: Liquid

Odor: Sharp odor (Slight)

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Emergency overview: DANGER!

OXIDIZER.

CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.

CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.

HARMFUL IF INHALED OR SWALLOWED.

MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: LUNGS, MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA, NOSE, SINUSES.

CORROSIVE MATERIAL.

POSSIBLE CANCER HAZARD.

CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Store in tightly-closed container. Avoid contact with combustible materials. Use only with adequate ventilation. Wash thoroughly after handling.

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

Potential acute health effects

Eyes: Corrosive to eyes..

Skin: Harmful in contact with skin. Corrosive to the skin.

Inhalation: Toxic by inhalation. Corrosive to the respiratory system.

Ingestion: Toxic if swallowed. May cause burns to mouth, throat and stomach.

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

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

Medical conditions: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. 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

See toxicological information (section 11).

#### SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
☐ Hydrogen	Peroxide	CAS# 7722-84-1	30%	W/W	OSHA TWA 1 ppm (1.4 mg/m³)
☐ Water, De	ionized ASTM Type II	CAS# 7732-18-5	70%	W/W	None Established

## **SECTION 4 FIRST AID MEASURES**

Heat, shock, friction, or contact with other materials may cause fire or explosion. Harmful if swallowed. Avoid breathing vapor or dust. Use adequate ventilation. Avoid contact with eyes, skin or clothes. Wash thoroughly after handling. Keep closed.

FIRST AID: CALL A PHYSICIAN. SKIN: In case of contact, immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse.

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. Seek medical attention.

INGESTION: Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. If exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

## SECTION 5 FIRE FIGHTING MEASURES

Use only water! Fire Extinguisher Type:

Strong oxidizer. Will not burn, but thermal Fire / Explosion Hazards:

decomposition will release oxygen. Contact with

combustible material may cause fire.

Wear self-contained breathing apparatus and protective clothing Fire Fighting Procedure:

to prevent contact with skin and clothing.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Flood area with water and drain to an approved chemical sewer or waste water treatment system. May be destroyed with sodium metabisulfite or sodium sulfite.

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), scoop up material and place in a sealable, liquid-proof 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 an appropriate container for disposal.

#### SECTION 7 HANDLING AND STORAGE

Do not ingest. Do not get in eyes, on skin or clothing. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash thoroughly after handling. Avoid contact with flammable or combustibles.

#### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: NIOSH/MSHA-approved respirator if required

Ventilation

Local Exhaust 🗸

Mechanical

Protective Gloves: Nitrile, PVC or neoprene.

Eye Protection: Goggles and Face

Shield

recommended

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, 11/2006)

Tivia 1.4 (Officed States, 172000)

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: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker

exposure to airborne contaminants below any recommended or statutory limits.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

100% Melting Point: -33 Deg C Percent Volatile by Volume:

**Boiling Point:** 108 Deg C **Evaporation Rate** Information not

available

Vapor Pressure: 17.4 @ 25 **Evaporation Standard** 

Deg C

Vapor Density: Information **Auto Ignition Temp** Not applicable

not available

Solubility in Water: Soluble Lower Flamm, Limit in Air Not applicable

Appearance /Odors: Colorless Upper Flamm. Limit in Air Not applicable

> liquid with slightly

pungent odor

Flash Point: Not

Flammable

Specific Gravity: 1.11

## SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability: Stable

Conditions to Avoid: Decomposes on exposure to light.

Materials to Avoid: Flammables, combustibles, Cyanides, Acids,

Hazardous Decomposition

permanganates, Reducing agents, Iron, copper alloys and caustic

Products:

None known.

Hazardous polymerization: Will Not Occur

Conditions to Avoid: None known

#### **SECTION 11 Toxicological Information**

Toxicity data

**United States** 

Product/ingredient name - Hydrogen Peroxide

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	Rabbitt

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 skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive).

Specific effects

Carcinogenic effects: No known significant effects or critical hazards.

Mutagenic effects: No known significant effects or critical hazards.

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

Sensitization

Ingestion: May cuase burns to mouth, throat and stomach.

Inhalation: Corrosive to the respiratory system.

Eyes: Corrosive to eyes.

Skin: Corrosive to the skin.

### 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 product of degradation are less toxic than the product itself.

## SECTION 13 Disposal Considerations

Disposal Method: An acceptable method of disposal is to dilute with a large amount of water and allow the hydrogen peroxide to decompose by discharge into a suitable treatment system in accordance with all regulatory agencies. The appropriate regulatory agencies should be contacted prior to disposal.

#### SECTION 14 Transport Information

DOT Classification: UN2014, Hydrogen Peroxide, Aqueous

Solutions, 30%, 5.1, (8), PG II

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 Toxic material Corrosive material Target organ effects

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

SARA 302/304/311/312 extremely hazardous substances: Hydrogen Peroxide

SARA 302/304 emergency planning and notification: Hydrogen Peroxide

SARA 302/304/311/312 hazardous chemicals: Hydrogen Peroxide

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Hydrogen Peroxide: Fire hazard, reactive, Immediate (acute) health hazard, Delayed (chronic) health

hazard.

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 30%

WHMIS (Canada):

Class C: Oxidizing material.

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

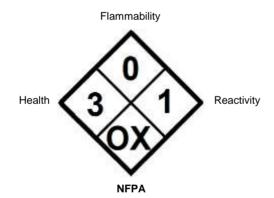
Class E: Corrosive material

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 required by the CPR.

**SECTION 16** 

#### **Additional Information**



Re		

7/20/2010	0	Review date for MSDS. STN
9/21/2011	0.1	DOT revised to add sub haz 8. LS
8/5/2013	0.2	Review date for MSDS. RLG

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.