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**1. Product and Company Identification**

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**Product Name** Hydrogen Peroxide 50%  
**CAS #** Mixture  
**Product Use** Industrial applications  
**Supplier information** PVS Benson  
1012 Gore Road  
Freelton, ON L0R1K0 CA  
Phone: 1-800-265-0014  
Emergency Services (24 hours / 7 days ): 1-519-821-0215

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**2. Hazards Identification**

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**Emergency overview** DANGER  
CORROSIVE  
Toxic.  
CAUSES EYE BURNS.  
CAUSES SKIN BURNS.  
OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE.  
Dangerously Reactive Material.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** Causes chemical burns. May cause blindness.

**Skin** Causes chemical burns.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

**Target organs** Eyes. Respiratory system. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** The product may cause burns to eyes, skin and mucous membranes.

**Potential environmental effects** See section 12.

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**3. Composition/Information on ingredients**

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Components	CAS #	Percent
Hydrogen peroxide	7722-84-1	40 - 70

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**4. First Aid Measures**

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**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Skin contact** Immediately flush with cool water for 15 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical advice immediately.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician** Symptoms may be delayed.

**General advice** If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

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**5. Fire-fighting Measures**

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**Flammable properties** Not flammable by WHMIS criteria.

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<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Container may explode in heat of fire. Decomposition releases oxygen which may intensify fire.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxygen.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available.
<b>Sensitivity to static discharge</b>	Not available.

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## 6. Accidental release measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Environmental precautions</b>	Do not discharge into lakes, streams, ponds or public waters.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapours or divert vapour cloud drift.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

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## 7. Handling and storage

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<b>Handling</b>	<p>DANGER -- CORROSIVE</p> <p>Use good industrial hygiene practices in handling this material. DO NOT get in eyes, on skin or clothing. Keep from contact with clothing and other combustible materials. Use only with adequate ventilation. Avoid breathing vapours or mists of this product. Keep away from heat, sparks and open flame. Wash thoroughly after handling.</p>
<b>Storage</b>	<p>Keep out of reach of children.</p> <p>Store in a closed container away from incompatible materials. Keep away from heat, open flames or other sources of ignition.</p>

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## 8. Exposure controls/Personal protection

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### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

<b>Exposure limits</b>	See above
<b>Engineering controls</b>	Local exhaust recommended. Use only under good ventilation conditions or with respiratory protection.
<b>Personal protective equipment</b>	
<b>Eye/Face protection</b>	Chemical splash goggles.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code. Rubber apron recommended.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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**9. Physical and chemical properties**

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<b>Appearance</b>	Clear
<b>Colour</b>	Colourless
<b>Form</b>	Liquid
<b>Odour</b>	Pungent
<b>Odour threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>pH</b>	Not available.
<b>Freezing point</b>	-52.22 °C (-62 °F)
<b>Boiling point</b>	114 °C (237.2 °F)
<b>Pour point</b>	Not available.
<b>Evaporation Rate</b>	Not available
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Vapour pressure</b>	18 mm Hg @20°C
<b>Vapour density</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Solubility (Water)</b>	Soluble
<b>Relative density</b>	1.196 g/cm <sup>3</sup> @20°C
<b>Viscosity</b>	Not available.
<b>VOC</b>	Not available
<b>Percent volatile</b>	Not available

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**10. Stability and reactivity**

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<b>Reactivity</b>	Dangerously reactive material. Stability depends upon many factors including temperature, pH, and the presence of impurities. Solutions that are completely free of contamination are relatively stable. May decompose violently if impurities are present.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Heat, open flames, static discharge, sparks and other ignition sources. Contamination. Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Caustics. Reducing agents. Combustible materials. Organic materials.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxygen.

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**11. Toxicological information**

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**Toxicological data**

<b>Components</b>	<b>Species</b>	<b>Test results</b>
Hydrogen peroxide (CAS 7722-84-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
	Rat	2000 mg/kg

Components	Species	Test results
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Mouse	2000 mg/kg
	Rat	75 mg/kg

#### Effects of acute exposure

<b>Eye contact</b>	Causes chemical burns. May cause blindness.
<b>Skin contact</b>	Causes chemical burns.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
<b>Sensitisation</b>	Non-hazardous by WHMIS criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS criteria.
<b>Carcinogenicity</b>	See below.

#### ACGIH Carcinogens

Hydrogen peroxide (CAS 7722-84-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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#### IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)	Volume 36, Supplement 7, Volume 71 - 3 Not classifiable as to carcinogenicity to humans.
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<b>Mutagenicity</b>	Non-hazardous by WHMIS criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS criteria.
<b>Name of Toxicologically Synergistic Products</b>	Not available.

## 12. Ecological information

<b>Ecotoxicity</b>	See below		
<b>Ecotoxicological data</b>			
<b>Components</b>	<b>Species</b>	<b>Test results</b>	
Hydrogen peroxide (CAS 7722-84-1)			
Algae	IC50	Algae	2.5 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7.7 mg/L, 48 Hours
<b>Persistence and degradability</b>	Not available.		
<b>Bioaccumulation/accumulation</b>	Not available		
<b>Mobility in environmental media</b>	Not available.		
<b>Environmental effects</b>	Not available.		
<b>Aquatic toxicity</b>	Not available.		
<b>Partition coefficient</b>	Not available.		
<b>Chemical fate information</b>	Not available.		

## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport information

### Transportation of Dangerous Goods (TDG - Canada)

**Basic shipping requirements:**

**UN number** UN2014  
**Proper shipping name** HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20 per cent but not more than 60 per cent hydrogen peroxide  
**Hazard class** 5.1  
**Subsidiary hazard class** 8  
**Packing group** II

TDG



## 15. Regulatory information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada WHMIS Ingredient Disclosure: Threshold limits**

Hydrogen peroxide (CAS 7722-84-1) 1 %

**WHMIS status** Controlled

**WHMIS classification** Class C - Oxidizing Material, Class D - Division 1B, Class E - Corrosive Material, Class F - Dangerously Reactive Material

**WHMIS labeling**



**Inventory Status**

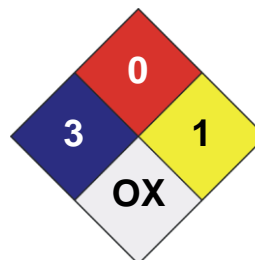
Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 3
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X



**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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<b>Expiry date</b>	31-October-2016
<b>Prepared by</b>	Dell Tech Laboratories Ltd. Phone: (519) 858-5021
<b>Other information</b>	This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.