



SAFETY DATA SHEET

1. Identification

Product identifier HYDROGEN PEROXIDE 10% PFP

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name BRENNTAG CANADA INC
Address 43 Jutland Rd.
 Toronto, ON M8Z 2G6
 Canada
Telephone 416-259-8231
Website <http://www.brenntag.com/canada/en/>
E-mail RegulatoryAffairs@Brenntag.ca
Emergency phone number 1-855-273-6824

2. Hazard(s) identification

| | | |
|------------------------------|--|------------|
| Physical hazards | Oxidising liquids | Category 3 |
| Health hazards | Skin corrosion/irritation | Category 1 |
| | Serious eye damage/eye irritation | Category 1 |
| | Specific target organ toxicity following repeated exposure | Category 2 |
| Environmental hazards | Not classified. | |

Label elements



Signal word Danger

Hazard statements May intensify fire; oxidiser. Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Do not breathe mist or vapour. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known.

Supplemental information 10 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 10 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|----|
| Hydrogen peroxide | | 7722-84-1 | 10 |
| Other components below reportable levels | | | 90 |

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

4. First-aid measures

| | |
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| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately. |
| Ingestion | Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. |
| Most important symptoms/effects, acute and delayed | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. |
| General information | Take off all contaminated clothing immediately. Contact with combustible material may cause fire. 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. Wash contaminated clothing before reuse. |

5. Fire-fighting measures

| | |
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| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | May intensify fire; oxidiser. Contact with combustible material may cause fire. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
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Methods and materials for containment and cleaning up

Use water spray to reduce vapours or divert vapour cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage**Precautions for safe handling**

Keep away from heat. Take any precaution to avoid mixing with combustibles. Keep away from clothing and other combustible materials. Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Recommendations listed in this section indicate the type of equipment, which will provide protection against overexposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Occupational exposure limits**US. ACGIH Threshold Limit Values**

| Components | Type | Value |
|--------------------------------------|------|-------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1 ppm |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value |
|--------------------------------------|------|--------------------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1.4 mg/m3 1 ppm |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value |
|--------------------------------------|------|-------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1 ppm |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components | Type | Value |
|--------------------------------------|------|-------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1 ppm |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value |
|--------------------------------------|------|-------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1 ppm |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value |
|--------------------------------------|------|-----------|
| HYDROGEN PEROXIDE (CAS 7722-84-1) | TWA | 1.4 mg/m3 |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value |
|------------|------|-------|
| | | 1 ppm |

Consult provincial or territorial exposure values, as may apply.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations only for the use of PPE. These recommendations cannot anticipate the variety of workplaces where the product will be used, nor how the product will be used in a variety of applications and processes. In determining appropriate PPE and engineering controls, it is the duty of the employer / user to evaluate their use of this product in accordance with the requirements of the local jurisdiction, and, if necessary, in conjunction with a professional industrial hygienist.

Eye/face protection Chemical respirator with organic vapour cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapour cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations 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 and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Physical state Liquid.

Form Liquid.

Colour CLEAR

Odour NO CHARACTERISTIC ODOUR

Odour threshold Not available.

pH 3

Melting point/freezing point 0 °C (32 °F)

Initial boiling point and boiling range 105.2 °C (221.36 °F) estimated

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density Not available.

Solubility(ies)

| | |
|--|----------------|
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

Other information

| | |
|-----------------------------|-------------------------------|
| Density | 9.26 lbs/gal |
| Explosive properties | Not explosive. |
| Oxidising properties | May intensify fire; oxidiser. |
| Percent volatile | 90 % estimated |
| Specific gravity | 1.11 |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | Greatly increases the burning rate of combustible materials. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerisation does not occur. |
| Conditions to avoid | Heat. Contact with incompatible materials. |
| Incompatible materials | Combustible material. Reducing Agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information**Information on likely routes of exposure**

| | |
|---------------------|--|
| Inhalation | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause irritation to the respiratory system. |
| Skin contact | Causes severe skin burns. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Causes digestive tract burns. |

| | |
|---|---|
| Symptoms related to the physical, chemical and toxicological characteristics | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |
|---|---|

Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Not available. |
| Skin corrosion/irritation | Causes severe skin burns and eye damage. |
| Serious eye damage/eye irritation | Causes serious eye damage. |

Respiratory or skin sensitisation**Canada - Alberta OELs: Irritant**

| | |
|-----------------------------------|----------|
| Hydrogen peroxide (CAS 7722-84-1) | Irritant |
|-----------------------------------|----------|

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation This product is not expected to cause skin sensitisation.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity**ACGIH Carcinogens**

| | |
|-----------------------------------|--|
| Hydrogen peroxide (CAS 7722-84-1) | A3 Confirmed animal carcinogen with unknown relevance to humans. |
|-----------------------------------|--|

Canada - Manitoba OELs: carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)

Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen peroxide (CAS 7722-84-1)

3 Not classifiable as to carcinogenicity to humans.

| | |
|---|---|
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. |

12. Ecological information

| | |
|--------------------------------------|--|
| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| Persistence and degradability | No data is available on the degradability of any ingredients in the mixture. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

| | |
|--|--|
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport information

Transportation information on packaging may be different from that listed.

DOT

| | |
|-------------------------------------|--|
| UN number | UN2984 |
| UN proper shipping name | Hydrogen peroxide, aqueous solutions with not less than 8 percent but less than 20 percent hydrogen peroxide (stabilized as necessary) (HYDROGEN PEROXIDE) |
| Transport hazard class(es) | |
| Class | 5.1 |
| Subsidiary risk | - |
| Label(s) | 5.1 |
| Packing group | III |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | A1, IB2, IP5, T4, TP1, TP6, TP24, TP37 |
| Packaging exceptions | 152 |
| Packaging non bulk | 203 |
| Packaging bulk | 243 |

IATA

| | |
|--------------------------------|---|
| UN number | UN2984 |
| UN proper shipping name | Hydrogen peroxide, aqueous solution with 8% or more but less than 20% hydrogen peroxide (stabilized as necessary) (HYDROGEN PEROXIDE) |

Transport hazard class(es)

| | |
|-------------------------------------|---|
| Class | 5.1 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | No. |
| ERG Code | 5L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Other information | |
| Passenger and cargo aircraft | Allowed with restrictions. |
| Cargo aircraft only | Allowed with restrictions. |

IMDG

| | |
|-------------------------------------|---|
| UN number | UN2984 |
| UN proper shipping name | HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 8% but less than 20% hydrogen peroxide (stabilized as necessary) (HYDROGEN PEROXIDE) |
| Transport hazard class(es) | |
| Class | 5.1 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-H, S-Q |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT**IATA; IMDG; TDG****TDG**

| | |
|-------------------------------------|---|
| UN number | UN2984 |
| UN proper shipping name | HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS |
| Transport hazard class(es) | |
| Class | 5.1 |
| Subsidiary risk | - |
| Packing group | III |
| Environmental hazards | Not available. |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada DSL Inventory: Registration Status

Hydrogen peroxide (H₂O₂) (CAS 7722-84-1) Listed

Canada Environmental Emergency Regulations Schedule 1: Listed Substance

Hydrogen peroxide (CAS 7722-84-1) Listed

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Hydrogen peroxide (CAS 7722-84-1) 1000 lbs

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
|-------------------|------------|------------------------------|--------------------------------------|---|---|
| Hydrogen peroxide | 7722-84-1 | 1000 | 1000 | | |

SARA 311/312 Hazardous chemical

Yes
Classified hazard categories
 Oxidizer (liquid, solid, or gas)
 Acute toxicity (any route of exposure)
 Skin corrosion or irritation
 Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

US state regulations

US. California Proposition 65

Not listed.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Toxic Chemical Substances (TCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

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

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

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Version No. 01

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