## SECTION 1: Identification

### 1.1. Product identifier

Product name : HYDROGENIC
Product code : 1300615

### 1.2. Recommended use and restrictions on use

Recommended use : Multi-purpose peroxide cleaner
Restrictions on use : Food Plant, Industrial and Institutional use only

### 1.3. Supplier

Project Clean Inc.
12 James St N, Suite 202
Hamilton, Ontario L8R 2J9
T 1 800 663 9925
regulatory@projectclean.com - www.projectclean.ca

### 1.4. Emergency telephone number

| Country | Organisation/Company | Address | Emergency number | Comment |
|---|---|---|---|---|
| Canada | CHEMTREC<br>Chemical Emergency | www.chemtrec.com | 1 800 424 9300 | 24hr/day 7days/week<br>within USA and Canada |
| Canada | CANUTEC<br>Transportation Emergency | www.canutec.com | 1 888 226 8832<br>*666 on a cell phone | 24hr/day 7days/week<br>within USA and Canada |

## SECTION 2: Hazard identification

### 2.1. Classification of the substance or mixture

**Classification (GHS CA)**

| | | |
|---|---|---|
| Serious eye damage/eye irritation, Category 2 | H319 | Causes serious eye irritation. |
| Skin sensitisation, Category 1 | H317 | May cause an allergic skin reaction. |

Full text of H-statements: see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS CA labelling**

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Warning

| | | |
|---|---|---|
| Hazard statements (GHS CA) | : | H317 - May cause an allergic skin reaction.<br>H319 - Causes serious eye irritation. |
| Precautionary statements (GHS CA) | : | P261 - Avoid breathing fume, mist, vapours, or spray.<br>P264 - Wash hands and affected areas thoroughly after handling.<br>P272 - Contaminated work clothing should not be allowed out of the workplace.<br>P280 - Wear protective gloves and eye protection.<br>P302+P352 - IF ON SKIN: Wash with plenty of water.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P321 - Specific treatment (see supplemental first aid instruction on the product SDS).<br>P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.<br>P337+P313 - If eye irritation persists: Get medical advice or attention.<br>P362+P364 - Take off contaminated clothing and wash it before reuse.<br>P501 - Dispose of contents and or container to hazardous or special waste collection point, in accordance with local, regional, national and or international regulation. |

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS CA)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Chemical name / Synonyms | Product identifier | % w/w |
|---|---|---|---|
| Alcohol Ethoxylate | Ethoxylated alcohols (C=7-21) | CAS-No.: 68991-48-0 | 1 – 5 |
| Hydrogen peroxide | Hydrogen peroxide, H2O2 | CAS-No.: 7722-84-1 | 1 – 5 |
| D-Limonene | (R)-1-Methyl-4-(1-methylethenyl)cyclohexene | CAS-No.: 5989-27-5 | ≤ 0.1 |

**The exact concentrations have been withheld as a trade secret. Les concentrations exactes ont été retenues en tant que secret commercial.*

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice or attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

Chronic symptoms : No effects known.

Expected Symptoms/Effects, Acute and Delayed : Causes serious eye irritation. May produce an allergic reaction.

### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Unsuitable extinguishing media

No additional information available

### 5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

General measures : Avoid contact with skin and eyes. Do not handle until all safety precautions have been read and understood. Clean up any spills as soon as possible, using an absorbent material to collect it.

#### 6.1.1. For non-emergency personnel

Protective equipment : Chemical goggles or face shield with safety glasses. Gloves (EN 374).

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing fume, mist, vapours, or spray.

### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls or personal protection".

Emergency procedures : Ventilate area. Evacuate unnecessary personnel. Keep away from combustible material. Cover spill with non combustible material, e.g.: sand or earth. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing fume, gas, mist, vapours, or spray. Wear personal protective equipment.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible products : Oxidizing agent.

Incompatible materials : Alkali metals and their alloys. combustible materials.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| **Hydrogen peroxide (7722-84-1)** | |
|---|---|
| **USA - OSHA - Occupational Exposure Limits** | |
| Local name | Hydrogen peroxide |
| OSHA PEL TWA | 1.4 mg/m³ |
| | 1 ppm |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

**Personal protective equipment:**
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

| Hand protection: |
|---|
| Protective gloves |

| Eye protection: |
|---|
| Safety glasses |

| Skin and body protection: |
|---|
| Not required for normal conditions of use |

| Respiratory protection: |
|---|
| In case of insufficient ventilation, wear suitable respiratory equipment |

**Personal protective equipment symbol(s):**

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear, Colourless liquid.
Colour : Colourless
Odour : Citrus scent
Odour threshold : No data available
pH : 5.5 – 6.5
Relative evaporation rate (butylacetate=1) : No data available
Relative evaporation rate (ether=1) : No data available

| | | |
|---|---|---|
| Melting point | : | No data available |
| Freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | > 100 °C |
| Auto-ignition temperature | : | Not self-igniting |
| Decomposition temperature | : | No data available |
| Upper and lower flammability or explosive limit | : | No data available, Not applicable |
| Vapour pressure | : | No data available |
| Relative vapour density at 20°C | : | No data available |
| Relative density | : | 1.01 – 1.03 |
| Solubility | : | Soluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | Thin like water |
| Explosive properties | : | Product is not explosive. |
| Explosive limits | : | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

| | | |
|---|---|---|
| Reactivity | : | The product is non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | No dangerous reactions known under normal conditions of use. |
| Conditions to avoid | : | None under recommended storage and handling conditions (see section 7). |
| Incompatible materials | : | Oxidizing agent. Combustible materials. Alkali metals and their alloys. |
| Hazardous decomposition products | : | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Hardening time: | : | No additional information available |

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) :

| **HYDROGENIC** | |
|---|---|
| LD50 oral rat | > 19242.7 mg/kg |

| HYDROGENIC | |
|---|---|
| LD50 dermal rat | > 83217.8 mg/kg |
| LC50 Inhalation - Rat | > 55.5 mg/l/4h |

| Alcohol Ethoxylate (68991-48-0) | |
|---|---|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |

| D-Limonene (5989-27-5) | |
|---|---|
| LD50 oral rat | > 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | > 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s)) |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| LD50 oral rat | 693.7 mg/kg Source: ECHA |
| LD50 dermal rabbit | 3000 mg/kg Source: ChemIDPlus |
| LC50 Inhalation - Rat | 2000 mg/m³ Source: ChemIDPlus |
| ATE CA (oral) | 693.7 mg/kg bodyweight |
| ATE CA (Dermal) | 3000 mg/kg bodyweight |
| ATE CA (vapours) | 2 mg/l/4h |
| ATE CA (dust,mist) | 2 mg/l/4h |

Skin corrosion/irritation : Not classified.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| STOT-single exposure | May cause respiratory irritation. |

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Likely routes of exposure : Skin and eyes contact. Inhalation.

Expected Symptoms/Effects, Acute and Delayed : Causes serious eye irritation. May produce an allergic reaction.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

Chronic symptoms : No effects known.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified.

Hazardous to the aquatic environment, long–term (chronic) : Not classified.

| HYDROGENIC | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | No data available |

| **Alcohol Ethoxylate (68991-48-0)** | |
|---|---|
| LC50 - Fish [1] | 70.1 mg/l 48 hours |
| EC50 - Crustacea [1] | 5.3 mg/l Daphnia, 48 hours |
| EC50 96h - Algae [1] | 3.389 mg/l Source: EPI SUITE |

| **D-Limonene (5989-27-5)** | |
|---|---|
| LC50 - Fish [1] | 720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) |
| LC50 - Fish [2] | 702 µg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [1] | 0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP) |
| EC50 - Crustacea [2] | 0.51 mg/l Test organisms (species): Daphnia magna |
| ErC50 algae | 0.32 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) |
| EC50 72h - Algae [1] | 0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |

| D-Limonene (5989-27-5) | |
|---|---|
| EC50 72h - Algae [2] | 0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| BCF - Fish [1] | 864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| LC50 - Fish [1] | 16.4 mg/l Source: ECHA |
| EC50 72h - Algae [1] | 1.38 mg/l Source: ECHA |
| Partition coefficient n-octanol/water (Log Pow) | -1.36 Source: IPCS |

## 12.2. Persistence and degradability

### HYDROGENIC

Persistence and degradability — Contains readily biodegradable component(s).

| Alcohol Ethoxylate (68991-48-0) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. |

| D-Limonene (5989-27-5) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. |
| ThOD | 3.29 g $O_2$/g substance |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

## 12.3. Bioaccumulative potential

### HYDROGENIC

Bioaccumulative potential — No bioaccumulation data available.

Partition coefficient n-octanol/water (Log Pow) — No data available

| D-Limonene (5989-27-5) | |
|---|---|
| Bioaccumulative potential | Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). |
| BCF - Fish [1] | 864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C) |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| Bioaccumulative potential | Not bioaccumulative. |
| Partition coefficient n-octanol/water (Log Pow) | -1.36 Source: IPCS |

## 12.4. Mobility in soil

### HYDROGENIC

Ecology - soil: No (test) data on mobility of the substance available.

Partition coefficient n-octanol/water (Log Pow): No data available

| Alcohol Ethoxylate (68991-48-0) | |
|---|---|
| Mobility in soil | 589.5 Source: EPI SUITE |

| D-Limonene (5989-27-5) | |
|---|---|
| Surface tension | No data available in the literature |
| Ecology - soil | Low potential for mobility in soil. |
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 3.049 – 3.801 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |
| Partition coefficient n-octanol/water (Log Pow) | 4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C) |

| Hydrogen peroxide (7722-84-1) | |
|---|---|
| Surface tension | 80.4 mN/m (20 °C, Pure substance, Calculated value, 100 %) |
| Ecology - soil | No (test)data on mobility of the component(s) available. |
| Partition coefficient n-octanol/water (Log Pow) | -1.36 Source: IPCS |

## 12.5. Other adverse effects

Ozone : Not classified

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents and or container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available or puncture and dispose of in a sanitary landfill.

Ecological information : Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (TDG) : Not applicable

### 14.3. Transport hazard class(es)

**TDG**

Transport hazard class(es) (TDG) : Not applicable

### 14.4. Packing group

Packing group (TDG) : Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

**TDG**

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. National regulations

| **Alcohol Ethoxylate (68991-48-0)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **D-Limonene (5989-27-5)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| **Hydrogen peroxide (7722-84-1)** |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

### 15.2. International regulations

| **Alcohol Ethoxylate (68991-48-0)** |
|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active |

| **D-Limonene (5989-27-5)** |
|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active<br>Listed on INSQ (Mexican National Inventory of Chemical Substances) |

| **Hydrogen peroxide (7722-84-1)** |
|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active<br>Listed on INSQ (Mexican National Inventory of Chemical Substances) |

## SECTION 16: Other information

Issue date : 02/19/2024

| **Full text of H-statements:** | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |

It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. Project Clean Inc. will accept no liability for damages or loss incurred from the improper handling and use of this product.
The information provided in the Safety Data Sheet has been obtained from current sources and is believed to be reliable.