BIODEGRADABLE DISINFECTANT

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 7/18/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product name : BIODEGRADABLE DISINFECTANT

Product code : A100160

1.2. Recommended use and restrictions on use

Recommended use : Health Canada registered, Ecologo® certified concentrated peroxide-based cleaner. Canada Drug Identification Number (DIN) # 2503476

Restrictions on use : Food Plant, Industrial and Institutional use only

1.3. Supplier

Project Clean Inc.
#250 - 69 John Street South
Hamilton, ON L8N 2B9
Canada
regulatory@projectclean.com - www.projectclean.ca

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Call CANUTEC CANADA OR CHEMTREC USA 24hr/day 7days/week
Within USA and Canada: CANADA: 613 996 6666 or *666 on a cell phone | USA: 800 424 9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
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) : Danger

Hazard statements (GHS CA) : H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.

Precautionary statements (GHS CA) : P261 - Avoid breathing mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents/container to hazardour or special waste collection point in accordance with local/provincial/federal regulations.

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	%
Hydrogen peroxide	Hydrogen peroxide, H2O2	CAS-No.: 7722-84-1	1 – 10
Alcohol Ethoxylate	Ethoxylated alcohols (C=7-21)	CAS-No.: 68991-48-0	1 – 5
D-Limonene	(R)-1-Methyl-4-(1-methylethenyl)cyclohexene	CAS-No.: 5989-27-5	0.1 – 1

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/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. Call a physician immediately.

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

First-aid measures general : If medical advice is needed, have product container or label and DIN number at hand.

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 : Serious damage to eyes.

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

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.2. Methods and materials for containment and cleaning up

For containment : Contain large spillage with sand or earth.

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

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

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

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 mist/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 dry, cool, well-ventilated area. Keep only in original container.

Packaging materials : HDPE.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrogen peroxide (7722-84-1)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA	1.4 mg/m³
OEL TWA [ppm]	1 ppm
Notations and remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
VEMP (OEL TWA) [ppm]	1 ppm
Notations and remarks	C3
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)

Hydrogen peroxide (7722-84-1)	
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Notations and remarks	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
Canada (New Brunswick) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Notations and remarks	Eye, URT, & skin irr
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Notations and remarks	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Notations and remarks	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
OEL STEL [ppm]	2 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)

Hydrogen peroxide (7722-84-1)	
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
OEL STEL [ppm]	2 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
Notations and remarks	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Hydrogen peroxide
OEL TWA [ppm]	1 ppm
OEL STEL [ppm]	2 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
USA - ACGIH - Occupational Exposure Limits	
Local name	Hydrogen peroxide
ACGIH OEL TWA [ppm]	1 ppm
Remark (ACGIH)	TLV® Basis: Eye, URT, & skin irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Hydrogen peroxide

Hydrogen peroxide (7722-84-1)	
OSHA PEL TWA [1]	1.4 mg/m³
OSHA PEL TWA [2]	1 ppm
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

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
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 : Not applicable

Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not flammable
Decomposition temperature	:	No data available
Flammability	:	Not flammable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	1.03 – 1.05
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 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. metals. Combustible materials.
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)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
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

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

Symptoms/effects after eye contact : Serious damage to eyes.

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

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)
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)

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

12.2. Persistence and degradability

Persistence and degradability	This product does not exhibit the properties of ignitability, corrosivity, reactivity or environmentally persistent toxicity. This product does not adversely inhibit a diverse aquatic range of organisms (animal, plant, bacteria) as required by the Ecologo® program under UL2759.

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

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

12.3. Bioaccumulative potential

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

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

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Reuse if possible. Otherwise dispose recovered material in accordance with all local, Provincial or Federal regulations. Dispose of contents/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.

Ecology - waste materials : 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

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

SECTION 16: Other information

Issue date : 07/18/2022

Full text of H-statements:	
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

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.