DiaSYS Inc.

Safety Data Sheet

Clarifier Handrub - 70% Alcohol

Version No. 1.0

SECTION 1: Identification

1.1. Product identifier

Product Name **Clarifier HandRub - 70% Alcohol**

Product Form Liquid

1.2 Intended Use of the Product

Hygienic hand sanitizer. For hand antiseptics. For use in resource-limited or remote areas with lack of accessibility to sinks or other facilities.

1.3 Details of the supplier of the safety data sheet

DiaSYS Inc.

501 Passmore Avenue,
Unit 2,
Toronto, Ontario M1V 5G4
Canada

Téléphone: (416) 292-3337
Fax: (416) 292-3344
Email: info@diasys.ca
Website : www.diasys.ca

1.4 Emergency telephone number

Emergency information service (416) 292-3337
9:00 am – 5:00 pm

SECTION 2: Hazard(s) Identification

2.1 Classification of the substance or mixture

GHS-US / CA Classification

Classification				
Section	**Hazard class**	**Category**	**Hazard class and category**	**Hazard statement**
A.3	serious eye damage/eye irritation	2A	Eye Irrit. 2A	H319

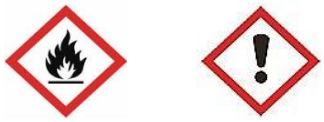
Section	Hazard class	Category	Hazard class and category	Hazard statement
B.6	flammable liquid	2	Flam. Liq. 2	H225

For full text of abbreviations: see SECTION 16

2.2 Label elements

GHS-US / CA Classification

Hazard Pictograms (GHS-US / CA)



Signal word Danger

Hazard statements (GHS-US / CA)

H225 Highly Flammable liquid and vapor.
H319 Causes serious eye irritation.

Precautionary statements (GHS-US / CA)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, and lighting equipment.
P242 Use only non-sparking tools.
P243 Take action to prevent static discharges.
P264 Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 Wear protective gloves protective clothing, and eye protection.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P370 + p378 In case of fire: Use appropriate media (see section 5) to extinguish.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4 Unknown Acute Toxicity (GHS-US / CA)

No data available.

SECTION 3: Composition / Information on Ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Description of the mixture

Hazardous ingredients

Name of substance	Identifier	Concentration % *	Classification acc. to GHS	Pictograms	Synonyms
Ethyl Alcohol	CAS No. 64-17-5	79.3549	Eye Irrit. 2A / H319 Flam. Liq. 2 / H225	 	Methylcarbinol / Ethanol/ ALCOHOL / Alcohol anhydrous / Alcohol / Grain alcohol.
Water	CAS No. 7732-18-5	18.2191	Not classified		Aqua
1,2,3-Propanetriol	CAS No. 56-81-5	2.2071	Not classified		Glycerin / Glycerine / Glycerol / 1,2,3-Trihydroxypropane/ GLYCERINE / Propane-1,2,3-triol

Name of substance	Identifier	Concentration % *	Classification acc. to GHS	Pictograms	Synonyms
Hydrogen peroxide	CAS No. 7722-84-1	0.2189	Acute Tox. 4 (Oral) /H302 Acute Tox. 4 (Inhalation: dust, mist) /H332 Skin Corr.1A/H314 Eye Dam. 1/H318 STOT SE 1 / H370 Ox. Liq. 1 / H271 Aquatic Acute 3, H402 Aquatic Chronic 3, H412		Hydrogen peroxide (H202) / HYDROGEN PEROXIDE / Hydrogen peroxide, aqueous solution / Dihydrogen dioxide / Hydrogen peroxide solution … % / Aqueous solution of hydrogen peroxide / Hydrogen peroxide solution … %

Notes

Full texts of H-phrases: see Section 16.

*Percentage are listed in wight by wight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: First-Aid Measures

4.1 Description of first- aid measures

General notes

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Following inhalation

When symptoms occur: Go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Following skin contact

Gently wash with plenty of soap and water. Obtain medical attention if irritation develops or persists.

Following eye contact

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

Notes for the doctor None.

4.2 Most important symptoms and effects, both acute and delayed

General notes

Causes serious eye irritation.

Following inhalation

Prolonged exposure may cause irritation.

Following skin contact

Prolonged exposure may cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Following eye contact

Contact causes severe irritation with redness and swelling of the conjunctiva.

Following ingestion

Ingestion may cause adverse effects.

Following chronic symptoms

None expected under normal conditions of use.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Dry chemical powder, alcohol resistant foam, carbon dioxide (CO_2). Water may be ineffective, but water should be used to keep fire-exposed container cool.

Unsuitable extinguishing media

Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2 Special hazards arising from the substance or mixture

Fire Hazard

Highly flammable liquid and vapor.

Explosion Hazard

May form flammable or explosive vapor-air mixture. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. Containers may rupture when exposed to excessive heat.

Reactivity

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

5.3 Advice for firefighters

Precautionary Measures Fire

Exercise caution when fighting any chemical fire.

Firefighting Instructions

Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting

Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products

Carbon oxides (CO, CO_2). Irritating fumes.

5.4 Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective Equipment and Emergency procedures

General Measures

Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

For non-emergency personnel

Protective Equipment

Use appropriate personal protective equipment (PPE).

Emergency Procedures

Evacuate unnecessary personnel. Stop leak if safe to do so.

For Emergency personnel

Protective Equipment

Equip cleanup crew with proper protection.

Emergency Procedures

Ventilate area. Eliminate ignition sources. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2 Environmental precautions

Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

For Containment

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Method for cleaning up

Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4 Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Additional Hazards when processed

Handle empty containers with care because residual vapors are flammable. Repeated or prolonged skin contact may cause dermatitis and defatting.

Precaution for safe handling

Avoid contact with skin, eyes, and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Avoid breathing vapors, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures

Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions

Store in a dry, cool, and well-ventilated place. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep in fireproof place.

Incompatible materials

Strong acids, strong bases, strong oxidizers. Strong mineral acids.

7.3 Specific end use(s)

Hygienic handrub. For hand antisepsis and for presurgical hand preparation. For use in resource-limited or remote areas with lack of accessibility to sinks or other facilities.

SECTION 8: Exposure Controls / Personal Protection

8.1 Control parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Ethyl Alcohol (64-17-5)

Name	Identi-fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	LEL [10%]	VEMP [ppm]	VEMP [mg/m³]	Nota-tion	Source
USA ACGIH	STEL			1000						ACGIH STEL
USA ACGIH	chemical category	Confirmed Animal Carcinogen with unknown relevance to Humans								ACGIH chemical category
USA OSHA	PEL	1000	1900							OSHA PEL
USA NIOSH	REL	1000	1900							NIOSH REL
USA IDLH	IDLH					3300				US IDLH
Alberta	TWA	1000	1880							OEL TWA
British Columbia	STEL			1000						OEL STEL
Manitoba	STEL			1000						OEL STEL
New Brunswick	TWA	1000	1880							OEL TWA
New-foundland & Labrador	STEL			1000						OEL STEL
Nova Scotia	STEL			1000						OEL STEL
Nunavut	STEL			1250						OEL STEL
Nunavut	TWA	1000								OEL TWA
Northwest Territories	STEL			1250						OEL STEL
Northwest Territories	TWA	1000								OEL TWA
Ontario	STEL			1000						OEL STEL
Prince Edward Island	STEL			1000						OEL STEL

Québec	VEMP						1000	1880		VEMP
Saskatchewan	STEL			1250						OEL STEL
Saskatchewan	TWA		1000							OEL TWA
Yukon	STEL			1000	1900					OEL STEL
Yukon	TWA	1000	1900							OEL TWA

1,2,3 Propanetriol (56-81-5)

Name	Identi-fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	LEL [10%]	VEMP [ppm]	VEMP [mg/m³]	Nota-tion	Source
USA OSHA	PEL		15						mist, tp	OSHA PEL
USA OSHA	PEL		5						mist, r	NIOSH REL
Alberta	TWA		10						mist	OEL TWA
British Columbia	TWA		10						mist, total	OEL TWA
British Columbia	TWA		3						mist, r	OEL TWA
New Brunswick	TWA		10						mist	OEL TWA
Nunavut	STEL				20				mist	OEL STEL
Nunavut	TWA		10						mist	OEL TWA
Northwest Territories	STEL				20				mist	OEL STEL
Northwest Territories	TWA		10						mist	OEL TWA
Québec	VEMP							10	mist	VEMP
Saskatchewan	STEL				20				mist	OEL STEL
Saskatchewan	TWA		10						mist	OEL TWA
Yukon	TWA	30 mppcf	10						mist	OEL TWA

Hydrogen Peroxide (7722-84-1)

Name	Identi-fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	LEL [10%]	VEMP [ppm]	VEMP [mg/m³]	IDLH [ppm]	Source
USA ACGIH	TWA	1								ACGIH TWA
USA ACGIH	chemical category	Confirmed Animal Carcinogen with unknown relevance to Humans								ACGIH chemical category
USA OSHA	PEL	1	1.4							OSHA PEL
USA NIOSH	REL	1	1.4							NIOSH REL
USA IDLH	IDLH								75	US IDLH
Alberta	TWA	1	1.4							OEL TWA
British Columbia	TWA	1								OEL TWA
Manitoba	TWA	1								OEL TWA
New Brunswick	TWA	1	1.4							OEL TWA
Newfound-land & Labrador	TWA	1								OEL TWA
Nova Scotia	TWA	1								OEL TWA
Nunavut	STEL			2						OEL STEL
Nunavut	TWA	1								OEL TWA
Northwest Territories	STEL			2						OEL STEL
Northwest Territories	TWA	1								OEL TWA
Ontario	TWA	1								OEL TWA
Prince Edward Island	TWA	1								OEL TWA
Québec	VEMP						1	1.4		VEMP

Name	Identi-fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	LEL [10%]	VEMP [ppm]	VEMP [mg/m³]	IDLH [ppm]	Source
Saskatchewan	STEL				2					OEL STEL
Saskatchewan	TWA	1								OEL TWA
Yukon	STEL			2	2.8					OEL STEL
Yukon	TWA	1	1.5							OEL TWA

Notation

i	Inhalable fraction
mist	as mist
tp	Total particulate
r	Respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
LEL	Lower explosive limit for flammable gases and vapors before the fire or explosion can occure.
VEMP	Vestibular Evoked Myogenic Potential.
IDLH	Immediately dangerous to life or health by poisonous gases at sufficiently high concentrations.

8.2 Exposure controls

Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity' of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure all national/local regulations are observed.

Individual protection measures (personal protective equipment)

Gloves, Protective clothing, protective goggles, insufficient ventilation: Wear respiratory protection.

Material for protective Clothing

Chemically resistant materials and fabrics. Wear fire / flame resistant / retardant clothing.

Skin and body protection

Wear suitable protective clothing.

Eye protection

Contact lenses should not be worn when working with this chemical! Wear approved safety goggles.

Hand protection

Protective gloves and goggles must be used if there is a risk of direct contact or splash.

Respiratory Protection

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Hygiene Measures

Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. When using, do not eat, drink, or smoke.

ECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties Appearance

Physical State	:	Liquid
Appearance	:	Clear
Odor	:	Alcohol
Odor Threshold	:	Not available
pH	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	-114.1 ℃ (-173.38 °F) (Ethyl alcohol)
Freezing Point	:	Not available
Boiling Point	:	78.5 ℃ (173.3 °F) (Ethyl alcohol)
Flash Point	:	17.5 ℃ (63.5 °F) (80% Ethyl alcohol solution)
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not applicable
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20℃	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Not available
Partition Coefficient: N-Octanol/water	:	Not available
Viscosity	:	Not available

ECTION 10: Stability and Reactivity

10.1 Reactivity

Reacts violently with strong oxidizers. Increased risk of fire or explosion.

10.2 Chemical Stability

Extremely flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4 Conditions to Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5 Incompatible Materials

Strong acids, strong bases, strong oxidizers. Strong mineral acids.

10.6 Hazardous Decomposition Products

Not expected to decompose under ambient conditions. Thermal decomposition generates carbon oxides (C0, CO_2). Acrolein.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects - Product

Acute Toxicity (Oral):	Not classified
Acute Toxicity (Dermal):	Not classified
Acute Toxicity (Inhalation):	Not classified
LD50 and LC50 Data:	Not available
Skin Corrosion/ Irritation:	Not classified
Eye Damage/ Irritation:	Causes serious eye irritation.
Respiratory or Skin Sensitization:	Not classified
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Specific Target Organ Toxicity (Repeated Exposure):	Not classified
Reproductive Toxicity:	Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

11.2 Information on toxicological effects – Ingredient(s)

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Ethyl alcohol	64-17-5	Oral	LD50	10470 mg/kg	Rat
Ethyl alcohol	64-17-5	Dermal	LD50	20 ml/kg	Rat
Ethyl alcohol	64-17-5	Inhalation	LC50	124.7 ml/l/4h	Rat
1,2,3-Propanetiol	56-81-5	Oral	LD50	12600 mg/kg	Rat
1,2,3-Propanetiol	56-81-5	Dermal	LD50	>10 g/kg	Rabbit
1,2,3-Propanetiol	56-81-5	Inhalation	LC50	>570 mg/m^3 (Exposure time: 1h)	Rat
Hydrogen peroxide	7722-84-1	Oral	LD50	1193 mg/kg (Species: Sprague Dawley; Exposure time: 4 h)	Rat
Hydrogen peroxide	7722-84-1	Dermal	LD50	4060 mg/kg	Rat
Hydrogen peroxide	7722-84-1	Dermal	LD50	>2000 mg/kg	Rabbit
Hydrogen peroxide	7722-84-1	ATE	US/CA	1.50 mg/l/4h	Dust, mist

Ethyl alcohol (64-17-5)

IARC Group	1
OSHO Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list

Hydrogen peroxide (7722-84-1)

IARC Group	3

SECTION 12: Ecological Information

12.1 Toxicity

Ecology - General

Not classified.

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Ethyl alcohol	64-17-5	LC50	11200 mg/l	Fish 1	
Ethyl alcohol	64-17-5	EC50	9268-14221mg/l	Daphnia magna 1	48 h
Ethyl alcohol	64-17-5	LC50	>100 mg/l	Pimephales promelas (static) Fish 2	96 h
Ethyl alcohol	64-17-5	ErC50	1000 mg/l	Algae	
Ethyl alcohol	64-17-5	NOEC	9.6 mg/l	Chronic Crustacea	
hydrogen peroxide	7722-84-1	LC50	16.4 mg/l	Pimephales promelas Fish 1	96 h
hydrogen peroxide	7722-84-1	ErC50	18-32 mg/l	Daphnia magna (Static)	48 h
hydrogen peroxide	7722-84-1	LC50	18-56 mg/l	Lepomis macrochirus (Static) Fish 2	96 h

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
1,2,3-Propanetriol	56-81-5	LC50	54000 (51000 – 57000) mg/l	Oncorhynchus mykiss (static) Fish 1	96 h

12.2 Persistence and Biodegradability

Biodegradation

Data are not established.

Persistence

Data are not established.

12.3 Bioaccumulative potential

Data are not established.

Ethyl alcohol (64-17-5)

Log Pow	-0.32

1,2,3-Propanetriol (56-81-5)

BCF Fish 1	No bioaccumulation
Log Pow	-1.76

Hydrogen peroxide (7722-84-1)

BCF Fish 1	No bioaccumulation

12.4 Mobility in soil

Data are not established.

12.5 Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information

Handle empty containers with care because residual vapors are flammable.

Ecology – Waste Materials

Avoid release to the environment.

SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name	:	ETHYL ALCOHOL SOLUTIONS
Hazard Class	:	3
Identification Number	:	UN1170
Label Codes	:	3
Packing Group	:	II
ERG Number	:	127

14.2. In Accordance with IMDG

Proper Shipping Name	:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Hazard Class	:	3
Identification Number	:	UN1170
Label Codes	:	3
Packing Group	:	II
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D

14.3. In Accordance with IATA

Proper Shipping Name	:	ETHYL ALCOHOL SOLUTION
Hazard Class	:	3
Identification Number	:	UN1170
Label Codes	:	3
Packing Group	:	II
ERG Code (IATA)	:	3L

14.4. In Accordance with TDG

Proper Shipping Name	:	ETHYL ALCOHOL SOLUTION
Hazard Class	:	3
Identification Number	:	UN1170
Label Codes	:	3
Packing Group	:	II

SECTION 15: Regulatory Information

15.1 US Federal Regulations

Clarifier Handrub – 70% Alcohol	
SARA Section 311 / 312 Hazard Class	Physical hazard - Flammable (gases, aerosols, liquids, or solids). Health hazard - Serious eye damage or eye irritation.

Ethyl alcohol (64-17-5)
Listed on the United State TSCA (Toxic Substances Control Act) inventory

1,2,3-Propanetriol (56-81-5)
Listed on the United State TSCA (Toxic Substances Control Act) inventory

Hydrogen peroxide (7722-84-1)
Listed on the United State TSCA (Toxic Substances Control Act) inventory Listed on the United State SARA Section 302

Water (7732-18-5)
Listed on the United State TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Ethyl alcohol (64-17-5)
US - Massachusetts – Right To Know List US - New Jersey – Right To Know Hazardous Substance List US - Pennsylvania – RTK (Right to Know) List

1,2,3-Propanetriol (56-81-5)
US - Massachusetts – Right To Know List US - New Jersey – Right To Know Hazardous Substance List US - Pennsylvania – RTK (Right to Know) List

Hydrogen peroxide (7722-84-1)
US - Massachusetts – Right To Know List US - New Jersey – Right To Know Hazardous Substance List US - Pennsylvania – RTK (Right to Know) List US - Pennsylvania – RTK (Right to Know) – Environment Hazard List

15.2 Canadian Regulations

Ethyl alcohol (64-17-5)
Listed on the Canadian DSL (Domestic Substance List)

1,2,3-Propanetriol (56-81-5)
Listed on the Canadian DSL (Domestic Substance List)

Hydrogen peroxide (7722-84-1)
Listed on the Canadian DSL (Domestic Substance List)

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substance List)

SECTION 16: Other Information, Including Date of Preparation or Last Revision

Date of preparation	:	2020-05-11
Revision	:	Version 1.0
Other Information	:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Abbreviations and acronyms

Abbreviations and acronyms	
Abbr.	**Descriptions of used abbreviations**
Acute Tox 4. (inhalation : dust, mist)	Acute toxicity (Inhalation : dust, mist) Category 4
Acute Tox 4. (Oral)	Acute toxicity (Oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment – Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard Category 3
OSHA	Occupational Safety and Health Administration
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously eye damage / eye irritation Category 1
Eye Irrit. 2A	Seriously eye damage / eye irritation Category 2A
Flam. Liq. 2	Flammable liquid Category 2
Ox. Liq.1	Oxidizing liquids Category 1
Skin Corr. 1A	Skin Corrosion / irritation Category 1A
STOTE SE 1	Specific target organ toxicity (Single exposure) Category 1
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
PEL	Permissible exposure limit
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
ppm	Parts per million
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit

Abbr.	Descriptions of used abbreviations
TWA	Time-weighted average

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly Flammable liquid and vapor.
H271	May cause fire or explosion; strong oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H370	Causes damage to organs.
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Disclaimer

Information for this material safety data sheet 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 this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. 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 within this form.