SAFETY DATA SHEET

Issuing Date 01-Apr-2020 **Revision Date** 08-Apr-2020 **Revision Number** 2

1. Identification

Product identifier

Product Name CleanX Hand Sanitizer Gel Formula (Ethanol-based)

Other means of identification

UN/ID no UN1170

Other information The hand sanitizer is manufactured using only the World Health Organization (WHO) recommended formulation with no deviations in ingredients or percentages

The compounder does not add other active or inactive ingredients. Different or additional ingredients may impact the quality and potency of the product

This is a personal care product. This SDS contains useful information for the safe handling and proper use of the product for industrial workplace conditions as well as unintended exposures as might occur with large spills. Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer's directions

Recommended use of the chemical and restrictions on use

Recommended use Hand sanitizer

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Expedition Retail Inc.
44 Frid St.,
Hamilton, ON L8P4M3

Emergency telephone number

Emergency Telephone 9059667351

2. Hazard(s) identification

Classification

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Causes serious eye irritation
Highly flammable liquid and vapor

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Ground and bond container and receiving equipment
Use non-sparking tools
Take action to prevent static discharges
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

Eyes
IF IN EYES: 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/attention

Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

Fire
In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
May be harmful if inhaled
Causes mild skin irritation
May cause drowsiness or dizziness

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Ethanol	64-17-5	65-70	-	
Water	7732-18-5	18.425	-	
Glycerol	56-81-5	1.45	-	
Hydrogen peroxide	7722-84-1	0.125	-	
Carbomer-940	9003-01-04	<1	-	
Triethanolamine	102-71-6	<1	-	

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact None under normal use conditions. If skin irritation occurs: Get medical advice/attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media None known based on information supplied.

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	Alberta	British Columbia	Ontario	Quebec
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1880 mg/m^3	STEL: 1000 ppm	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1880 mg/m^3

Glycerol 56-81-5	TWA: 10 mg/m^3	TWA: 10 mg/m^3 TWA: 3 mg/m^3	-	TWA: 10 mg/m^3
Hydrogen peroxide 7722-84-1	TWA: 1 ppm TWA: 1.4 mg/m^3	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Colorless
Odor	Alcohol
Odor threshold	No information available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	78.3 °C / 172.9 °F	
Flash point	17.5 °C / 63.5 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	**No information available.**
Oxidizing properties	**No information available.**
Softening point	**No information available**
Molecular weight	**No information available**
VOC Content (%)	**No information available**
Liquid Density	**No information available**
Bulk density	**No information available**

10. Stability and reactivity

Reactivity **None under normal use conditions.**

Chemical stability **Stable under normal conditions.**

Possibility of hazardous reactions **None under normal processing.**

Conditions to avoid **Heat, flames and sparks.**

Incompatible materials **None known based on information supplied.**

Hazardous decomposition products **None known based on information supplied.**

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation **Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May be harmful if inhaled. May cause drowsiness or dizziness.**

Eye contact **Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.**

Skin contact **Specific test data for the substance or mixture is not available. Causes mild skin irritation. Prolonged contact may cause redness and irritation.**

Ingestion **Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.**

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms **May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.**

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m^3 (Rat) 1 h
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m^3 (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X
Hydrogen peroxide 7722-84-1	A3	Group 3	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Eyes, Skin, Respiratory system.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanol 64-17-5	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)

Glycerol 56-81-5	-	LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss)	-	-
Hydrogen peroxide 7722-84-1	-	LC50: 18 - 56mg/L (96h, Lepomis macrochirus) LC50: =16.4mg/L (96h, Pimephales promelas) LC50: 10.0 - 32.0mg/L (96h, Oncorhynchus mykiss)	-	EC50: 18 - 32mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Ethanol 64-17-5	-0.32
Glycerol 56-81-5	-1.76

Mobility in soil No information available

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. Transport information

Note: While this product is a hazardous material, it may be shipped in a limited quantity that presents a limited hazard during transportation, due to its form, quantity, and packaging. The information listed below is for shipping bulk material.

Transport Canada has authorized relief for shipping hand sanitizer by road, rail, and vessel within Canada by issuing a temporary certificate (TU 0752) available at https://www.tc.gc.ca/media/documents/tdg-eng/0752-eng-TransportationofDangerousGoodsDirectorateTransportCanada.pdf with additional guidance at https://www.tc.gc.ca/eng/tdg/temporary-certificates.html.

TDG

UN/ID no	UN1170
Proper shipping name	ETHANOL SOLUTION
Hazard class	3
Packing group	II
Special Provisions	150
Description	UN1170, ETHANOL SOLUTION, 3, II

IATA

UN number	UN1170
UN proper shipping name	Ethanol solution
Transport hazard class(es)	3
Packing group	II
ERG Code	3L
Special Provisions	A180, A3, A58
Description	UN1170, Ethanol solution, 3, II

IMDG

UN number	UN1170
UN proper shipping name	ETHANOL SOLUTION
Transport hazard class(es)	3
Packing group	II
EmS-No	F-E, S-D
Special Provisions	144
Description	UN1170, ETHANOL SOLUTION, 3, II, (17.5°C C.C.)

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. Other information

NFPA	Health hazards	2	Flammability	3	Instability 0	Physical and chemical properties -
HMIS	Health hazards	2	Flammability	3	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend	Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION		
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the
SDS U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Issuing Date	**01-Apr-2020**
Revision Date	**08-Apr-2020**
Revision Note	**SDS sections updated: 14.**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet