



SAFETY DATA SHEET

Issuing Date January 5, 2015

Revision Date New

Revision Number 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Clorox Commercial Solutions® Clorox® Bleach-Free Hand Sanitizer Non-Sticky Formula (Contains Hand Moisturizers)

Other means of identification

Natural Product Number 80021843

Recommended use of the chemical and restrictions on use

Recommended use Hand sanitizer

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

The Clorox Company of Canada Ltd.
150 Biscayne Crescent
Brampton, Ontario L6W 4V3

Phone: 1-905-595-8200

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION


Classification

This product is considered hazardous under GHS.

Flammable liquids	Category 2
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GHS Label elements, including precautionary statements

Emergency Overview

Signal word	Danger
Hazard statements Highly flammable liquid and vapour	
	
Appearance Clear, colourless	Physical State Thin liquid
	Odour Alcohol

Precautionary Statements - Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear eye protection such as safety glasses.

Precautionary Statements - Response

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
In case of fire: Use dry chemical, carbon dioxide (CO₂), foam, or water spray to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents in accordance with all applicable federal, state, and local regulations.

Hazards not otherwise classified (HNOC)

Inhalation of high concentrations of vapour or mist may cause irritation of the respiratory tract, headaches, dizziness, nausea, vomiting, and malaise. Ingestion may cause central nervous system depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

Unknown Toxicity

0.2% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May cause slight eye irritation.
Toxic to aquatic life with long lasting effects.

Interactions with Other Chemicals

Can react with strong oxidizers, inorganic acids, and halogens.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %	Trade Secret
Ethanol	64-17-5	60 - 75	*
Isopropyl alcohol	67-63-0	5 - 10	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Hold eye open and rinse slowly and gently with water for 15–20 minutes. If present, remove contact lenses after the first 5 minutes of rinsing, then continue rinsing eye. Call a poison control centre or doctor for further treatment advice.
Skin Contact	Not applicable.
Inhalation	Move to fresh air. If breathing problems develop, call a doctor.
Ingestion	Drink a glassful of water. Call a doctor or poison control centre.
Protection of First-aiders	Remove all ignition sources. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects	May cause slight eye irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, carbon dioxide (CO₂), foam, or water spray.

Unsuitable Extinguishing Media

Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

Alcohol flames may not be readily visible. Vapours are heavier than air and may travel to source of ignition and flash back. Vapours may form explosive mixtures with air.

Hazardous Combustion Products

Oxides of carbon.

Explosion Data

Sensitivity to Mechanical Impact No.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Eliminate all potential sources of ignition. Take precautionary measures against static discharges.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions Prevent entry into surface water or sanitary sewers. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Eliminate all potential sources of ignition, and ventilate area. Absorb and containerize. Do not flush into surface water or sanitary sewer system.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Store in accordance all applicable regulations and fire codes. Keep containers tightly closed in a cool, well-ventilated place away from heat, sparks, open flames, and hot surfaces.

Incompatible Products Strong oxidizers, inorganic acids, and halogens.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection None required for consumer use. If splashes are likely to occur, wear safety glasses.

Skin and Body Protection No special protective equipment required.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Thin liquid	Odour	Alcohol
Appearance	Clear	Odour Threshold	No information available
Colour	colourless		

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	6 - 9	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	~21°C (closed cup)	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapour pressure	No data available	None known
Vapour density	No data available	None known
Specific Gravity	~0.84	None known
Water Solubility	Complete	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	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
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

<u>Other Information</u>	
Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity

Can react with strong oxidizers, inorganic acids, and halogens.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None known.

Conditions to avoid

Keep away from heat, sparks, open flames, and hot surfaces.

Incompatible materials

Strong oxidizers, inorganic acids, and halogens.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Inhalation of high concentrations of vapour or mist may cause irritation of the respiratory tract, headaches, dizziness, nausea, vomiting, and malaise.
Eye Contact	May cause slight irritation.
Skin Contact	Prolonged or repeated use may cause dryness and/or slight irritation.
Ingestion	Ingestion may cause central nervous system depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanol 64-17-5	-	-	125 mg/L (Rat, 4 h)
Isopropyl alcohol 67-63-0	4.4 g/kg (Rat)	12.9 g/kg (Rabbit)	16000 (Rat, 8 h)

Information on toxicological effects

Symptoms May cause slight redness and tearing of eyes.

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

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethanol 64-17-5	A3	Group 1	Known	X
Isopropyl alcohol 67-63-0	-	Group 3	-	X

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 Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage.

STOT - single exposure	No information available.
STOT - repeated exposure Chronic Toxicity	No information available. Contains a known or suspected carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. Contains a known or suspected reproductive toxin. Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Repeated abuse can have long-term health effects.
Target Organ Effects	Eyes, blood, central nervous system (CNS), liver, reproductive system, respiratory system.
Aspiration Hazard	Not an aspiration hazard.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
49.6 g/kg

ATEmix (inhalation-dust/mist)
184 mg/l

ATEmix (inhalation-vapour)
627 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethanol 64-17-5		LC50: 12.0 - 16.0 mL/L (96 h static) <i>Oncorhynchus mykiss</i> LC50: 13400 - 15100 mg/L (96 h flow-through) <i>Pimephales promelas</i> LC50: > 100 mg/L (96 h static) <i>Pimephales promelas</i>	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50: 9268 - 14221 mg/L (48 h) <i>Daphnia magna</i> EC50: 10800 mg/L (24 h) <i>Daphnia magna</i> EC50: 2 mg/L (48 h Static) <i>Daphnia magna</i>
Isopropyl alcohol 67-63-0	96h EC50: > 1000 mg/L (<i>Desmodesmus subspicatus</i>) 72h EC50: > 1000 mg/L (<i>Desmodesmus subspicatus</i>)	96h LC50: = 9640 mg/L (<i>Pimephales promelas</i>) 96h LC50: = 11130 mg/L (<i>Pimephales promelas</i>) 96h LC50: > 1400000 µg/L (<i>Lepomis macrochirus</i>)		48h EC50: 13299 mg/L
Glycerin 56-81-5		LC50: 51 - 57 mL/L (96 h static) <i>Oncorhynchus mykiss</i>		EC50: > 500 mg/L (24 h) <i>Daphnia magna</i>

Persistence and Degradability

No information available.

Bioaccumulation

Chemical Name	Log Pow
Ethanol 64-17-5	-0.32
Isopropyl alcohol 67-63-0	0.05

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging

Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT

Limited quantity.

TDG

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II
Description	UN1170 ETHANOL, 3, II

ICAO

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II
Description	UN1170 ETHANOL, 3, II

IATA

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II
Description	UN1170 ETHANOL, 3, II

IMDG/IMO

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II
EmS No.	F-E, S-D
Description	UN1170, ETHANOL, 3, II, FP 21C

15. REGULATORY INFORMATION

Chemical Inventories

TSCA All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.

DSL/NDSL All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Canada Regulations

WHMIS Hazard Class

B2 - Flammable liquid



16. OTHER INFORMATION

NFPA Health Hazard 1 Flammability 3 Instability 0 Physical and Chemical Hazards -

HMIS Health Hazard 1 Flammability 3 Physical Hazard 0 Personal Protection -

Prepared By Product Stewardship
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Latham, NY 12110
1-800-572-6501

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Revision Note New

Reference CLX51734-001-A/51734.001

General 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