

SAFETY DATA SHEET

SDS DATE: 2020/04/15

FILE NAME: **Hand Sanitizer**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hand Sanitizer (Alcohol Antiseptic 80%)
SYNONYMS: Disinfectant Solution (Topical)
PRODUCT CODES: 419302002

MANUFACTURER & SUPPLIER: Bioriginal Food & Science Corp.
ADDRESS: 102 Melville Street
 Saskatoon, SK
 S7J 0R1, Canada

EMERGENCY PHONE: (306)-975-1166
FAX PHONE: (306)-242-3829
EMERGENCY PHONE: CANUTEC: 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone.

RECOMMENDED USE: Disinfection

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview: Product may ignite if exposed to heat or open flame.

Potential Hazards: Highly flammable liquid and vapor, Category 3.
 Health, 2

Precautionary statements: For external use only. Read label before use.
 Keep out of reach of children.

Hazard Pictograms



Signal word (GHS)	Danger
Hazard statements (GHS)	H226 - Flammable liquid and vapor H315 - Causes skin irritation H320 - Causes eye irritation H335 - May respiratory irritation
Precautionary statements (GHS)	Prevention P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P260 - Do not breathe mist, spray, vapors. P264 - Wash exposed skin thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear eye protection, face protection, protective clothing, protective gloves. Response P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P332+P313 - If skin irritation occurs: Get medical advice/attention. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - 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.

SAFETY DATA SHEET

SDS DATE: 2020/04/15

FILE NAME: **Hand Sanitizer**

	P308+P313 - IF exposed or concerned: Get medical advice/attention. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P363 - Wash contaminated clothing before reuse. P370+P378 - IN CASE OF FIRE: Use carbon dioxide (CO ₂), powder, alcohol-resistant foam to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents/container to comply with local, state and federal regulations P235 - Keep cool.
--	--

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number N/A
Description Clear, colourless solution
Ingredient

Ingredient	CAS	Proportion ¹	GHS Classification
Ethanol (ethyl alcohol)	64-17-5	80% (v/v)	Flam. Liq. 2, H225 Carc. 1A, H350 Repr. 2, H361
Glycerol	56-81-5	1.45% (v/v)	Not classified
Hydrogen Peroxide (3%, v/v)	7722-84-1	0.125% (v/v)	Skin corr./irrit. 2 (3%, v/v) Eye dam./irrit. 2A (3%, v/v)
Purified Water	7732-18-5	18.425% (v/v)	Not classified

SECTION 4: FIRST AID INFORMATION AND MEASURES

Oral Exposure:

If swallowed, wash out mouth with water if person is conscious. If symptoms persist consult a doctor.

Inhalation Exposure:

If inhaled, remove person to fresh air. If symptoms persist consult a doctor.

Dermal Exposure:

If contact with skin, wash with soap and copious water. If symptoms persist consult a doctor.

Eye Exposure:

If contact with eyes, wash with copious amounts of water for at least 15 min. Remove any contact lens(es) if able during rinsing. Consult a doctor if any irritation or concern persists.

If seeking medical attention show SDS documentation to doctor.

SECTION 5: FIRE-FIGHTING INFORMATION AND MEASURES

Extinguishing media:

Suitable extinguishing agents: Use any suitable media: Carbon dioxide, dry chemical powder or appropriate chemical or alcohol resistant foam as allowed by environmental conditions.

Unsuitable extinguishing agents (for safety reasons): Water may be unsuitable for large alcohol-based fires.

Specific hazards arising from substance or mixture: Carbon dioxide and carbon monoxide produced upon combustion. Vapour may form explosive mixtures in air.

Advice for Firefighting

Protective equipment: Wear suitable protective equipment (eye-ware, gloves and clothing). Refer to Section 8. Use NIOSH-approved respiratory/breathing apparatus.

Additional information: Avoid inhaling gases, fumes, mist, aerosols and vapours.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear suitable PPE to prevent contact with the spill, such as, gloves, safety goggles, respirator, disposable foot ware.

Environmental precautions:

Prevent from reaching drains, sewer or waterways. Avoid releasing into the environment. Remove sources of heat, sparks or flame.

Methods and materials for containment and clean up:

Wear suitable PPE. Contain the spill with an inert material then place in the bag for chemical waste disposal. Use a water rinse for final clean-up.

Large spills: Due to traffic accidents, etc., should be reported immediately to Authorized state Authority for assistance.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

SAFETY DATA SHEET

FILE NAME: **Hand Sanitizer**

SDS DATE: 2020/04/15

Highly flammable liquid

Use suitable PPE and caution when handling. Avoid exposure to skin, inhalation, eyes and clothing. Use good hygiene practices. Abstain from eating, drinking or smoking. Avoid sources of heat sparks or flame and take precautions to prevent static electricity build-up.

Conditions for safe storage:

Keep stored in a tightly closed container. Protect from direct sunlight, away from sources of heat sparks or flame. Use in well ventilated areas. Do not puncture, drag, or slide this container. Never use pressure to empty.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: No applicable occupational exposure limit.

Appropriate engineering controls: Avoid sources of heat sparks or flame and take precautions to prevent static electricity build-up. No special ventilation requirements. General room ventilation is adequate.

Respiratory protection: Not required under normal usage.

Protection of skin: PPE is generally not required. Use suitable resistant/impermeable material selected based on activity and potential exposure.

Eye protection: Not required under normal usage.

Routine hygienic measures: The chemical, physical and toxicological properties of this product have not been thoroughly investigated. Exercise due care whilst handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colourless liquid	Explosion limit (lower) Explosion limit (upper)	ND ND
Odour	Alcohol odour	Vapour pressure	No information available
Odour threshold	ND	Vapour density	No information available
pH value	6-8	Solubility	Completely soluble
Melting/freezing point	-115°C (100% alcohol)	Partition coefficient (n-octanol/water)	No information available
Boiling point	78°C (100% alcohol)	Auto/self-ignition temperature	N/A
Flash point	Approx 26°C	Decomposition temperature	No information available
Evaporation rate	ND	Viscosity	No information available
Flammability (solid/gas)	N/A	Relative Density	Approx. 0.86 g/mL
ND	Not determined	N/A	Not applicable

SECTION 10: CHEMICAL STABILITY AND REACTIVITY

Reactivity: The reactive properties have not been thoroughly investigated.

Chemical stability: Stable under normal circumstances. Avoid strong acids, strong bases and strong oxidizing agents.

Hazardous decomposition products: Fumes, carbon dioxide, carbon monoxide.

Conditions to avoid: Heat, flame and sparks.

Incompatible materials: None under normal processing.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:

Ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)

Chronic toxicity: No additional information

Corrosion irritation: Causes skin irritation

Sensitization: No additional information

Single target organ (STOT): May cause drowsiness or dizziness. Causes damage to organs (CNS, optic nerve) (oral, dermal)

Numerical measures: No additional information

Carcinogenicity: Alcohol – Carcinogenic to humans

Mutagenicity: No additional information

Reproductive toxicity: No additional information

Route of Exposure:

Skin/Eye: Cause serious eye irritation

Inhalation: EXPOSURE TO HIGH CONCENTRATIONS: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Respiratory difficulties. Central nervous system depression. Symptoms similar to those listed under ingestion.

Ingestion: AFTER ABSORPTION OF LARGE QUANTITIES: Risk of aspiration pneumonia. Red skin. Body temperature rise. Damp/clammy skin. Excited/restless. Accelerated heart action. Central nervous system depression. Dizziness. Narcosis. Headache. Drunkenness. Nausea. Vomiting. Disturbed motor response. Coordination disorders. Visual disturbances. Impaired concentration. Delusions. Disturbed sensation of pain. Disturbances of heart rate. Disturbances of consciousness. Tremor. Cramps/uncontrolled muscular contractions. Dilated pupils.

SAFETY DATA SHEET

SDS DATE: 2020/04/15

FILE NAME: **Hand Sanitizer**

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity persistence and degradation: No information available
Bioaccumulation potential: No information available
Mobility: Dispersible in water.
Other adverse effects: No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of as chemical waste in accordance with federal, state, regional or local environmental regulations, i.e., US 40CFR262.11. Contact a licensed professional where applicable. Do not dispose in household waste. Dispose of empty containers as unused material. Ensure complete and accurate classification.

SECTION 14: TRANSPORT INFORMATION

UN-Number: UN1987
UN proper shipping name: Alcohols n.o.s. (ethanol)
DOT (US Department of Transport): UN1987
IMDG: UN1987 Alcohols n.o.s. (ethanol)
IATA: UN1987 Alcohols n.o.s. (ethanol)

SECTION 15: REGULATORY INFORMATION

SARA (US) Section 311/312 (Specific toxic chemical listing): Components listed (ethanol).

Physical hazard - Flammable (gases, aerosols, liquids, or solids)

Health hazard - Serious eye damage or eye irritation

Health hazard - Skin corrosion or Irritation

TSCA (Toxic Substances Control Act): Components listed.

Canada:

Canadian Domestic Substance List (DSL): Components listed.

WHMIS: (Workplace Hazardous Materials Information System (Canada))

Ethanol Class B Division 3 – Combustible Liquid
Class D Division 2 Subdivision A – Very toxic material causing other toxic effects

Hydrogen Peroxide (0.125%, v/v) Uncontrolled product

Water Uncontrolled product

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms:

CAS: Chemical Abstract Service
CFA: Code of Federal Regulations (USA)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
HMIS: Hazardous Materials Identification System (USA)
IATA: International Air Transport Association
NFPA: National Fire Protection Association (USA)
NPRI: National Pollutant Release Inventory (Canada)
RCRA: Resource Conservation and Recovery Act (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)

Bioriginal cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Bioriginal's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations. This safety data sheet shall not be deemed to create any warranty of any kind (including warranty of merchantability or fitness for a particular purpose). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.