SDS Date: 04/13/2020

Lucas Oil Products Hand Sanitizer

Conforms to HazCom 2012/United States

SECTION 1 – IDENTIFICATION

Product Name: Hand Sanitizer, part #11175, 11176

Chemical Name: Mixture

Synonyms: N/A

Chemical Family: Alcohol Solution

Manufacturer: Lucas Oil Products, Inc
302 North Sheridan Street Corona, California
92880-2067

Recommended Use: Hand Sanitizer

For Chemical Emergency or Accident
Call ChemTel 1-800-255-3924 (USA, Canada, Puerto Rico, US V.I.)
1-813-248-0585 (International)

SECTION 2 – HAZARDS IDENTIFICATION

Signal Words: Danger

Hazard Classifications: Flammable Liquids 2 - H225
Eye Irritation 2A - H319

Label Elements

Hazard Statements: H225 - Highly flammable liquid and vapors.
H319 - Causes serious eye irritation.

Precautionary statements

Prevention	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking. P233 - Keep container tightly closed. P235 - Keep cool. P240 - Ground and/or bond container and receiving equipment. P241 - Use explosion-proof - electrical, ventilating and/or lighting equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P264 - Wash thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves and eye/face protection. P281 - Use personal protective equipment as required.
Response	P370+P378 - In case of fire: Use appropriate media Carbon Dioxide, "alcohol -type foam," or dry chemical for extinction. P362 - Take off contaminated clothing and wash before reuse. P332+P313 - If skin irritation occurs: Get medical advice/attention. 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. P321 - Specific treatment, see supplemental first aid information. P308+P313 - IF exposed or concerned: Get medical advice/attention.
Storage/Disposal	P403+P235 - Store in a well-ventilated place. Keep cool. P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
Risk Phrases	R11 - Highly flammable.
Safety Phrases	S7 - Keep container tightly closed S16 - Keep away from sources of ignition - No Smoking.
Other Hazards	According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

Emergency Response Overview

Physical State: Liquid.

Hazards: **Highly Flammable liquid/vapor** (Ethanol Flash Point = 55 °F). Potentially explosive vapor. High vapor pressure (VP = 45 mm Hg) and heavier than air (VD = 1.6). Use an alcohol resistant foam to suppress fires.

May cause irritation to the eyes, skin and respiratory system. May affect the central nervous system. May be harmful or fatal if swallowed. May be harmful if inhaled or absorbed through the skin.

Routes of Entry: Inhalation; skin contact; eye contact; and ingestion.

Color/Odor: Colorless liquid. Alcohol like odor. Odor threshold reported to be between 50 and 1,000 ppm.

Potential Health Effects

Symptoms of Acute Exposure

Eye: May cause severe eye irritation, redness, tearing, blurred vision and conjunctivitis.

Skin: Prolonged or repeated contact may cause irritation, dermatitis, defatting, redness, itching and inflammation.

Inhalation: May cause upper respiratory irritation. Exposures over 1,000 ppm may cause central nervous system (CNS) effects such as excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, loss of appetite, and an inability to concentrate. At higher concentrations there may be a loss of reflexes, convulsions, seizures, loss of consciousness, coma, respiratory arrest and death.

Ingestion: Toxic if swallowed. Ingestion can cause drunkenness, depression, nausea, vomiting, diarrhea, liver damage and death. Aspiration into the lungs can cause severe chemical pneumonitis or pulmonary edema or hemorrhage which may be fatal. May cause harmful CNS effects similar to those listed under “Inhalation”.

Chronic Health Effects

Long term exposure to Hand Sanitizer may cause loss of appetite, weight loss, nervousness, memory loss and liver damage. May also cause dermatitis, malnutrition, amnesia, dementia, cardiac myopathy, hepatotoxicity, GI bleeding, pancreatitis, and death.

Medical Conditions Aggravated by Exposure

Pre-existing disorders of the CNS, liver, respiratory system, skin, eyes and GI track may be aggravated by exposure to Hand Sanitizer.

SECTION 3 – COMPOSITION & INGREDIENTS

Material	Percent Volume	CAS Number
Ethanol	80 %	64-17-5
Water	15.1 %	7732-18-5
Glycerol	1.4 %	56-81-5
Hydrogen Peroxide	0.1 %	7722-84-1

SECTION 4 – FIRST AID MEASURES

Eye: Flush eyes with large amounts of clean water for at least 15 minutes. Flush under upper and lower eyelids. If pain or irritation persists, seek medical attention.

Skin: Flush affected area with clean water and soap if available. Remove contaminated clothing. If symptoms or irritation persists, seek medical attention.

Inhalation: Move victim to fresh air. For respiratory distress, provide oxygen or administer CPR if necessary. Seek medical attention if victim is unconscious or if discomfort persists.

Ingestion: DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY PHYSICIAN. If victim is conscious, provide water to dilute. Do not give anything by mouth if victim is unconscious or having convulsions. CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Use dry chemical, carbon dioxide, water spray (fog) or an alcohol resistant foam. Consult foam manufacturer for appropriate application rates and ratios. Water and water spray may only cool the fire, not extinguish the fire.

Conditions to Avoid

Extremely flammable liquid and vapor. Vapors form flammable or explosive mixtures at room temperature. Avoid open flames, sparks and static discharges. Vapor may travel back a considerable distance to a source of ignition and flash back. Vapors may accumulate in low or confined areas. Runoff to sewers may create a fire or explosion hazard. Alcohols burn with a pale blue flame which may be hard to see under normal lighting conditions. Persons may only be able to feel the heat of the flame without seeing the flame. Ethanol is miscible in water and water alone may not put out an ethanol fire.

Fire Fighting Instructions

Firefighters should wear approved self-contained breathing apparatus (SCBA) and firefighter personal gear. If possible, limit the amount of fuel available to the fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Apply a alcohol resistant foam. Containers may explode in heat or fire. Cool containers by flooding with water until fire is completely extinguished. Keep personnel away from tanks engulfed in flames. Runoff to sewers may create a fire or explosion hazard. If possible, collect or contain fire water and keep out of sewer systems or bodies or water. Clothing, rags or similar organic material contaminated with Hand Sanitizer and stored in a closed space may undergo spontaneous combustion. Transfer to and from commonly bonded and grounded containers.

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	1	Health:	1
Fire:	3	Fire Hazard:	3
Instability:	0	Physical Hazard:	0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Release Response

Small Spills: Eliminate all sources of ignition. Small spills may be flushed and diluted with large amounts of water, or absorbed with an inert dry material, and place in an appropriate waste disposal container. Use spark-proof tools and explosion proof equipment. Dispose of collected waste via a licensed waste disposal firm in an appropriate manner. Transfer to and from commonly bonded and grounded containers. Do not touch or walk through spilled material.

Large Spills: Eliminate all sources of ignition. Isolate area and keep unnecessary personnel away. Do not touch or walk through spilled material. Stop leak if without risk. Contact emergency personnel. Use water spray and/or alcohol resistant foam to reduce vapor generation. Contain spill and, if possible, prevent groundwater or surface water exposure and runoff. Use SCBA and suitable personal protective equipment for emergency response. Prevent entry to confined spaces unless SCBA and air monitoring can be performed and proper permit procedures can be followed. For highway or railway spills, contact CHEMTREC at 800-424-9300.

Additional Environmental Considerations

Depending on size and nature of release, local, state and federal authorities may need to be notified. Contact the National Response Center at 800-424-8802 if the release contaminates either the ground or surface waters. Contact local responders/ fire officials/water treatment plants if release gets into public sewer/treatment systems.

SECTION 7 – HANDLING AND STORAGE

Handling: Open and handle containers with care. Assure adequate ventilation. Keep away from heat, sparks and flames. Metal containers should be grounded and bonded. Use explosion proof electrical equipment for ventilation, lighting and material handling. Do not pressurize, cut, weld, braze, solder, drill on or near storage containers. Assure empty containers are free of vapor. Assure filters are dry prior to disposal. Do not siphon by mouth to transfer product between containers. Never smoke while handling containers or product.

Storage: Protect containers against physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. All ignition sources should be eliminated. Ground all drums and transfer vessels when handling. Ground all storage cabinets. Assure adequate ventilation in storage areas. Follow NFPA 30, Flammable and Combustible Liquids Code, for all storage and handling. Consult with local fire codes for additional storage information.

SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Limits

Material	**OSHA Exposure Limits**	
Ethanol	1,000 ppm	TWA

TWA = 8 Hour Time Weighted Average
STEL = 15 Minute Short Term Exposure Limit

Engineering Controls

Engineering controls should be used whenever feasible to maintain concentrations below acceptable exposure limits including but not limited to enclosures, local ventilation and dilution ventilation. When transferring contents, the metallic container must be grounded and bonded to the receiving container to prevent static discharges. Ensure emergency use eyewash/shower stations are available and are maintained for immediate use. Use air monitoring equipment prior to confined space entry or emergency response. Use hot work permit when performing welding, cutting or other hot work in areas where product is stored, transferred or used. Use confined space entry permit prior to entry into a process or storage tank or container that previously contained the product.

Personal Protective Equipment

OSHA requires a Personal Protective Equipment program for the eyes and face to comply with 29 CFR 1910.133.

Eyes: Safety glasses should be used for minimum eye protection. Use chemical goggles or a faceshield when transferring Hand Sanitizer or when a high risk or exposure may exist. Eye and face protection should comply with the most recent version of ANSI Z87.1. OSHA requires a Personal Protective Equipment program for the eyes and face to comply with 29 CFR 1910.133.

Skin: As a minimum, wear cotton long sleeve shirts and pants or flame resistant/retardant clothing. Additional protective clothing (neoprene or nitrile) and boots may be needed when there is a higher risk of exposure.

Hands: Chemical resistant gloves (rubber, neoprene or nitrile) should be worn at all times when handling Hand Sanitizer in bulk. Replace gloves that are torn, cut or worn. OSHA requires a Personal Protective Equipment program for the hands to comply with 29 CFR 1910.138.

Respiratory: An approved properly fitted air-purifying or air-supplied respirator should be used if exposure may exceed the OSHA exposure limits provided in SECTION 2 of this SDS. Respiratory protection should comply with the most recent version of ANSI Z88.2. OSHA requires a Personal Protective Equipment program for the eyes and face to comply with 29 CFR 1910.134.

SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

Formula: Ethanol (C_2H_6O), water, glycerol

Appearance: Colorless liquid.

Odor: Alcohol like odor.

Odor Threshold: Reported to be between 50 and 1,000 ppm.

Boiling Point: 172 °F

Freezing Point: - 75 °F

Specific Gravity: 0.88 (Water = 1.0)

pH: Range = 7.4 to 7.8

Vapor Pressure: 45 mm Hg @ 68 °F = 0.87 PSI @ 68 °F

Viscosity: Approximately 1 cP @ 68 °F

Vapor Density: 1.3 (Air = 1.0)

Evaporate Rate: 1.7 (Butyl acetate = 1.0)

Volatility: 100%

Partition Coefficient: Not Known

Solubility: Soluble in water.

Flammability Classification: OSHA/NFPA Class 1B Flammable Liquid.

Flash Point: 68°F

Auto-Ignition Temperature: Ethanol: 685 °F

Flammable Limits (by volume): Ethanol Lower: 3.3 %
Ethanol Upper: 19 %

Hazardous Combustion Products: Combustion products include carbon monoxide and carbon dioxide.

SECTION 10 – STABILITY & REACTIVITY

Stability: The product is stable. Under normal conditions, hazardous polymerization will not occur. The product does not react with air or water.

Conditions to Avoid: Avoid contact with all possible sources of ignition. Do not pressurize, cut, weld, braze, solder, drill, grind or exposure containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Materials to Avoid: Avoid contact with strong acids, alkalis and oxidizers such as chlorine, acetyl chloride and other oxidizers which may cause a violent reaction. The presence of oxygen above 20.9 percent will cause increased fire hazards.

Decomposition: Not expected to decompose under normal conditions. Burning or heating will produce carbon monoxide and carbon dioxide, and to a lesser extent nitrogen and sulfur oxides (NO_x, SO_x).

SECTION 11 – TOXICITY INFORMATION

Eye Effects: Hand Sanitizer vapor can produce eye tearing and a burning sensation. Liquid exposure causes pain, irritation, tearing and a burning sensation.

Skin Effects: Short-term exposure to Hand Sanitizer should not cause irritation or other skin effects. Prolonged or repeated exposure to Hand Sanitizer may cause skin irritation and dermatitis by de-fatting the skin. Hand Sanitizer may be absorbed through the skin.

Inhalation Effects: May cause upper respiratory irritation. Exposures to ethanol over 1,000 ppm may cause central nervous system (CNS) effects such as excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, loss of appetite, and an inability to concentrate. At higher concentrations there may be a loss of reflexes, convulsions, seizures, loss of consciousness, coma, respiratory arrest and death.

Ethanol: Inhalation LC-50, Rat (10 hour) = 20,000 PPM

Ingestion Effects: Toxic by ingestion. Ethanol is rapidly absorbed through the gastrointestinal tract and is normally metabolized and excreted in a few hours. Can be fatal or cause blindness if swallowed in extreme quantities. Ingestion can cause headache, nausea, dizziness or narcosis. Chronic over-exposure can cause damage to the gastrointestinal tract, CNS, liver, kidneys and cardiovascular system.

Ethanol: Oral LD-50, Rat = 7,060 mg/kg

Carcinogenicity: The International Agency for Research on Cancer (IARC) determined that alcoholic beverages are carcinogenic to humans and the occurrence of malignant tumors in the oral cavity, pharynx, larynx, esophagus and liver is causally related to the consumption of alcohol. The American Conference of Governmental Hygienists lists ethanol as not classifiable as a human carcinogen (Category A4). Animal studies do not provide indications of carcinogenicity.

IARC – Ethanol, not listed
NTP – Ethanol, not listed
OSHA – Ethanol, not listed

Reproductive & Developmental Effects: May cause defects in the CNS, heart, kidney, lungs, gastrointestinal tract and limbs.

SECTION 12 – ECOLOGICAL INFORMATION

Environmental Fate: When spilled on land, Hand Sanitizer will volatilize, biodegrade and/or leach into the ground. It is anticipated that ethanol will neither absorb into soil nor bio-concentrate in aquatic organisms. When spilled into surface waters, ethanol is miscible with water. May be toxic to species such as the daphnia magna (water flea) and others depending on concentration. In water, photolysis, oxidation, hydrolysis, and biodegradation are expected to occur

Bioaccumulation: Bioaccumulation is not expected to occur.

SECTION 13 – DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized. Reclaim or reuse whenever possible. All recovered material should be labeled, packaged, transported and disposed of or reclaimed in conformance with applicable state and federal laws and regulations. Dispose of products via a licensed waste disposal contractor. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Consult your local, state or federal authorities.

SECTION 14 - TRANSPORTATION INFORMATION

DOT Limited Quantity Provision applies for inner packaging not over 1.0 L (0.3 gallons) net capacity. 49CFR173.150

PSMA has provided a temporary relief during the COVID-19 emergency for hand sanitizers contained in packaging having a capacity not over 8 gallons and inner packagings not exceeding 1 gallon.

https://www.phmsa.dot.gov/news/temporary-relief-notice-transportation-hand-sanitizer-during-covid-19-emergency-revised

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
DOT Classification	1170	Ethanol, or Ethyl Alcohol	3	II		DOT Guide 127
TDG Classification	1170	Ethanol, or Ethyl Alcohol	3	II		DOT Guide 127

SECTION 15 – REGULATORY INFORMATION

Federal, State and Local Regulatory Information

This product is on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state, or local regulations; consult those regulations applicable to your facility/operation.

SARA Section 311/312 – Hazard Categories:

- Immediate (acute) Health Hazard
- Delayed (chronic) Health Hazard
- Fire Hazard

SECTION 16 – OTHER INFORMATION

This Safety Data Sheet (SDS) was prepared in accordance with 29 CFR 1910.1200 by Lucas Oil. The information on this SDS was obtained from sources believed to be reliable. The information is provided without any warranty, expressed or implied, regarding its correctness. Information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The end user of Hand Sanitizer has the responsibility for evaluating the adequacy of the data under the conditions of use, for determine the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. Lucas Oil does not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use or disposal of Hand Sanitizer. If the product is used as a component in another product this SDS information may not be applicable.

SDS Date: 04/13/20