## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Product name | $:$ HAND SANITIZER |  |
| :--- | :--- | :--- |
| Other means of identification | $:$ | not applicable |
| Recommended use | $:$ | Hand Sanitizer |
| Restrictions on use | $:$ | Reserved for industrial and professional use. |
| Product dilution information | $:$ Product is ready to use. |  |
| Company | $:$University of Nebraska - Lincoln <br>  <br> Emebraska Innovation Campus <br> Lincoln, NE |  |
| Emergency telephone | $:$ | $1-800-424-9300$ (US) |
| Issuing date | $:$ | $04 / 7 / 2020$ |

## SECTION 2. HAZARDS IDENTIFICATION

## GHS Classification

Flammable liquids
Eye irritation
GHS Label element
Hazard pictograms

: Warning
: Flammable liquid and vapor. Causes serious eye irritation.

Precautionary Statements
Category 3
: Category 2A

$$
1
$$

## : Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed.

## Response:

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. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
Store in a well-ventilated place. Keep cool.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.
Other hazards : None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

SAFETY DATA SHEET
HAND SANITIZER (Bitrex added to denature)

| Chemical Name | CAS-No. | Concentration (\%) |
| :--- | :---: | :---: |
| ethanol | $64-17-5$ | $80 \%$ |
| hydrogen peroxide | $7722-84-1$ | $<1 \%$ |
| glycerin | $56-81-5$ | $<2 \%$ |
| water | $7732-18-5$ | $17-18 \%$ |

## SECTION 4. FIRST AID MEASURES

In case of eye or skin contact : Rinse with water.
If swallowed $\quad:$ Rinse mouth. Get medical attention if symptoms occur.
If inhaled : Get medical attention if symptoms occur.
Protection of first-aiders Notes to : No special precautions are necessary for first aid responders. :
physician Treat symptomatically.
See toxicological information (Section 11)

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards during fire fighting

Hazardous combustion products

Special protective equipment for fire-fighters

Specific extinguishing methods
: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
: High volume water jet
: Fire Hazard
Keep away from heat and sources of ignition. Flash back possible over considerable distance.
Beware of vapors accumulating to form explosive concentrations.
Vapors can accumulate in low areas.
: Carbon oxides
: Use personal protective equipment.
: Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Environmental precautions
Methods and materials for containment and cleaning up
: Remove all sources of ignition. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
: Do not allow contact with soil, surface or ground water.
: Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling

Conditions for safe storage
: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from fire, sparks and heated surfaces.
: Keep away from heat and sources of ignition. Keep in a cool, wellventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : $0^{\circ} \mathrm{C}$ to $35^{\circ} \mathrm{C}$

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

| Ingredients | CAS-No. | Form of <br> exposure | Permissible <br> concentration | Basis |
| :--- | :--- | :--- | :--- | :--- |
| ethanol | $64-17-5$ | TWA | $1,000 \mathrm{ppm}$ | ACGIH |
|  |  | TWA | $1,000 \mathrm{ppm}$ <br> $1,900 \mathrm{mg} / \mathrm{m} 3$ | NIOSH REL |
|  |  | TWA | $1,000 \mathrm{ppm}$ <br> $1,900 \mathrm{mg} / \mathrm{m} 3$ | OSHA Z1 |

## Personal protective equipment

| Eye protection | $:$ No special protective equipment required. |
| :--- | :--- |
| Hand protection | $:$ No special protective equipment required. |
| Skin protection | $:$ No special protective equipment required. |
| Respiratory protection | $:$ No personal respiratory protective equipment normally required. |
| Hygiene measures | $:$ No specific measures identified. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | $:$ liquid |
| :--- | :--- |
| Color | $:$ opaque, white |
| Odor | $:$ alcoholic |
| pH | $: 6.3-8.5,100 \%$ |
| Flash point | $: 23^{\circ} \mathrm{C}$ closed cup |
| Odor Threshold | $:$ no data available |
| Melting point/freezing point | $:$ no data available |
| Initial boiling point and <br> boiling range | $:$ no data available |

## SAFETY DATA SHEET

## HAND SANITIZER

| Evaporation rate | $:$ no data available |
| :--- | :--- |
| Flammability (solid, gas) | $:$ no data available |
| Upper explosion limit | $:$ no data available |
| Lower explosion limit | $:$ no data available |
| Vapor pressure | $:$ no data available |
| Relative vapor density | $:$ no data available |
| Relative density | $: 0.869-0.873$ |
| Water solubility | $:$ no data available |
| Solubility in other solvents | $:$ no data available |
| Partition coefficient: n- | $:$ no data available |
| octanol/water | $:$ no data available |
| Autoignition temperature | $:$ no data available |
| Thermal decomposition | $:$ no data available |
| Viscosity, kinematic | $:$ no data available |
| Explosive properties | $:$ no data available |
| Oxidizing properties | $:$ no data available |
| Molecular weight | $:$ no data available |

## SECTION 10. STABILITY AND REACTIVITY

| Chemical stability | : Stable under normal conditions. |
| :--- | :--- |
| Possibility of hazardous <br> reactions | $:$ No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | $:$ Heat, flames and sparks. |
| Incompatible materials | $:$ None known. |
| Hazardous decomposition <br> products | $:$ Carbon oxides |

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation, Eye contact, Skin contact
exposure

## Potential Health Effects

| Eyes | $:$ Causes serious eye irritation. |
| :--- | :--- |
| Skin | $:$ Health injuries are not known or expected under normal use. |
| Ingestion | $:$ Health injuries are not known or expected under normal use. |
| Inhalation | $:$ Health injuries are not known or expected under normal use. |
| Chronic Exposure | $:$ Health injuries are not known or expected under normal use. |


| Eye contact | Redness, Pain, Irritation |
| :---: | :---: |
| Skin contact | No symptoms known or expected. |
| Ingestion | No symptoms known or expected. |
| Inhalation | No symptoms known or expected. |
| Toxicity |  |
| Acute oral toxicity | Acute toxicity estimate : $>5,000 \mathrm{mg} / \mathrm{kg}$ |
| Acute inhalation toxicity | no data available |
| Acute dermal toxicity | no data available |
| Skin corrosion/irritation | no data available |
| Serious eye damage/eye irritation | no data available |
| Respiratory or skin sensitization | no data available |
| Carcinogenicity |  |
| IARC | No component of this product present at levels greater than or equal to $0.1 \%$ is identified as probable, possible or confirmed human carcinogen by IARC. |
| OSHA | No ingredient of this product present at levels greater than or equal to $0.1 \%$ is identified as a carcinogen or potential carcinogen by OSHA. |
| NTP | No ingredient of this product present at levels greater than or equal to $0.1 \%$ is identified as a known or anticipated carcinogen by NTP. |
| Reproductive effects | no data available |
| Germ cell mutagenicity | no data available |
| Teratogenicity | no data available |
| STOT-single exposure | The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| STOT-repeated exposure | no data available |
| Aspiration toxicity | no data available |
| Ingredients |  |
| Acute inhalation toxicity | ethanol 4 h LC50 rat: $117 \mathrm{mg} / \mathrm{l}$ |
| Ingredients |  |
| Acute dermal toxicity | ethanol <br> LD50 rabbit: $15,800 \mathrm{mg} / \mathrm{kg}$ |

## SECTION 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Environmental Effects : Harmful to aquatic life.

## SAFETY DATA SHEET

## HAND SANITIZER

## Product

| Toxicity to fish | $:$ no data available |
| :--- | :--- |
| Toxicity to daphnia and other <br> aquatic invertebrates | $:$ no data available |
| Toxicity to algae $:$ no data available <br> Ingredients $:$ <br> Toxicity to fish  <br>  96 h LC50 Fish: $11,000 \mathrm{mg} / \mathrm{l}$ |  |

## Persistence and degradability

 no data available
## Bioaccumulative potential

no data available

## Mobility in soil

no data available

## Other adverse effects

no data available

## SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods | :The product should not be allowed to enter drains, water courses or <br> the soil. Where possible recycling is preferred to disposal or <br> incineration. If recycling is not practicable, dispose of in compliance <br> with local regulations. Dispose of wastes in an approved waste <br> disposal facility. <br> Disposal considerations <br>  <br> :Dispose of as unused product. Empty containers should be taken to <br> an approved waste handling site for recycling or disposal. Do not re- <br> use empty containers. <br> RCRA - Resource <br> Conservation and Recovery <br> Authorization Act Hazardous <br> waste$\quad$D001 (Ignitable) |
| :--- | :--- | :--- |

## SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

## Land transport (DOT)

| UN number | $: 1170$ |  |
| :--- | :--- | :--- |
| Description of the goods | $:$ Ethanol solutions |  |
| Class | $: 3$ | $:$ Alcohols, n.o.s, |
| Packing group | $:$ III |  |
| Environmentally hazardous | $:$ no | OR |
| II |  |  |

## Sea transport (IMDG/IMO)

## UN number : 1170

Description of the goods : ETHANOL SOLUTION

## SAFETY DATA SHEET

## HAND SANITIZER

Class : 3
Packing group : III
Marine pollutant : no

## SECTION 15. REGULATORY INFORMATION

## EPCRA - Emergency Planning and Community Right-to-Know

## CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

## SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards . Fire Hazard
Acute Health Hazard

SARA 302
: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:
1907/2006 (EU) :
not determined

United States TSCA Inventory :
On TSCA Inventory
Canadian Domestic Substances List (DSL) :
This product contains one or several components that are not on the Canadian DSL nor NDSL.

## SECTION 16. OTHER INFORMATION

## NFPA:



Special hazard

HMIS III:

| HEALTH | $\mathbf{2}$ |
| :--- | :--- |
| FLAMMABILITY | $\mathbf{3}$ |
| PHYSICAL HAZARD | $\mathbf{0}$ |
| $0=$ not significant, $1=$ Slight, <br> $2=$ Moderate, = High <br> $4=$ Extreme, $*=$ Chronic |  |


| Issuing date | $: 04 / 07 / 2020$ |
| :--- | :--- |
| Version | $: 1.0$ |
| Prepared by | $:$ EHS |

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