1. IDENTIFICATION
Product identifier
Mixture identification:
   Trade name: Hand Sanitizer 80% Alcohol
Other means of identification:
   Trade code: SN3000001011C
Recommended use of the chemical and restrictions on use:
Recommended use: Health services
Restrictions on use: This product is not intended for inhalation use.
Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party
Sensient Flavors LLC
5115 Sedge Blvd
Hoffman Estates, IL 60192
USA
Transport Emergency:(CHEMTREC): +1 800-424-9300 (CHEMTREC INTERNATIONAL): +1 703-527-3887
Product Information: +1 847-645-7000

2. HAZARD(S) IDENTIFICATION
This mixture has not been tested as a whole. It contains ingredients that could present a health hazard to employees, as outlined below.

Classification of the chemical
Flammable liquid and vapour.
Causes serious eye irritation.

Label elements
Pictograms and Signal Words

Warning

Hazard statements
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilation/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash contact areas thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P370+P378 In case of fire: Use dry chemical, foam or CO2 for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with all applicable regulations.

Hazard not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Not determined

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification are as follows. The identity of one or more individual components of this mixture and/or the exact percentage concentrations of disclosed components of this mixture are considered proprietary information and are being withheld as trade secret information pursuant to 29 CFR 1910.1200(i).

List of components

<table>
<thead>
<tr>
<th>Qty</th>
<th>Name</th>
<th>Ident. Numb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 50.01 %</td>
<td>Ethyl Alcohol</td>
<td>CAS:64-17-5, EC:200-578-6</td>
</tr>
<tr>
<td>15-30 %</td>
<td>Trade Secret</td>
<td></td>
</tr>
<tr>
<td>1-5 %</td>
<td>Glycerin</td>
<td>CAS:56-81-5, EC:200-289-5</td>
</tr>
</tbody>
</table>

The actual concentration of the components listed above is withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:
- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose off safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:
- After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
- Protect uninjured eye.

In case of Ingestion:
- Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:
- Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:
- Carbon dioxide (CO2).

Unsuitable extinguishing media:
- None in particular.

Specific hazards arising from the chemical

- Do not inhale explosion or combustion gases.
- Burning produces heavy smoke.
- Hazardous combustion products: Not determined
- Explosive properties: Not Relevant (UN Test 3(a)ii BAM Fallhammer)
- Oxidizing properties: Not Relevant (Oxidizing Liquids Test Chamber)

Special protective equipment and precautions for fire-fighters

- Use suitable breathing apparatus.
- Collect contaminated fire extinguishing water. Do not discharge into drains.
- Move undamaged containers from immediate hazard area but only if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

Methods and material for containment and cleaning up
Suitable material for taking up: absorbing material, organic, sand
Wash with plenty of water.

7. HANDLING AND STORAGE
Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities
Keep from freezing. Store in tightly closed containers in cool, dry location. Use adequate ventilation.
Always keep in a well ventilated place.
Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Avoid accumulating electrostatic charge.

Incompatible materials:
None in particular.

Instructions regarding storage premises:
Cool and adequately ventilated.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters

Community Occupational Exposure Limits (OEL)

<table>
<thead>
<tr>
<th>Component</th>
<th>OEL Type</th>
<th>Country</th>
<th>Long Term mg/m³</th>
<th>Long Term ppm</th>
<th>Short Term mg/m³</th>
<th>Short Term ppm</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>ACGIH</td>
<td></td>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerin</td>
<td>ACGIH</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls: Not determined

Individual protection measures

Eye protection:
Use close fitting safety goggles, don’t use eye lens.

Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

Physical State: Liquid
Appearance and colour: Clear Liquid, Colourless (Visual)
Odour: Alcoholic (Organoleptic)
Odour threshold: Not determined (Organoleptic)

pH: 6.00 (pH meter)
Melting point / freezing point: Not determined
Initial boiling point and boiling range: Not determined (OECD GUIDELINE 103)
Flash point: 29.4 °C (84.9 °F) (Pensky-Martens Closed Cup Test (ASTM D93))
Evaporation rate: Not determined (Shell Thin-Film Evaporometer ASTM D3539 - 87(2004) )
Upper/lower flammability or explosive limits: Not determined (ASTM E681-09)
Vapour density: Not determined (Calculation)
Vapour pressure: Not determined (ASTM D5190 - 07 for Petroleum Products)
Relative density: Not determined (OECD GUIDELINE 109)
Solubility in water: Not determined (OECD GUIDELINE 105)
Solubility in oil: Not determined (OECD GUIDELINE 105)
Partition coefficient (n-octanol/water): Not determined (OECD GUIDELINE 123 Slow-Stirring Method)
Auto-ignition temperature: Not determined (ASTM E659 Method for Liquid Chemicals.)
Partition coefficient (n-octanol/water): Not determined (ASTM E659 Method for Liquid Chemicals.)
Decomposition temperature: Not determined (Time Pressure Test Vessel)
Viscosity: Not determined (OECD GUIDELINE 114)
Explosive properties: Not determined (UN Test 3(a)ii BAM Fallhammer)
Oxidizing properties: Not determined (Oxidizing Liquids Test Chamber)
Solid/gas flammability: Not determined (ASTM Method E681-94.)

Other information
Substance Groups relevant properties Not determined
Miscibility: Not determined
Fat Solubility: Not determined
Conductivity: Not determined (Conductivity meter)

10. STABILITY AND REACTIVITY
Reactivity
It may generate dangerous reactions (See subsections below)

Chemical stability
It may generate dangerous reactions (See subsections below)

Possibility of hazardous reactions
None.

Conditions to avoid
Avoid accumulating electrostatic charge.

Incompatible materials
Avoid contact with combustible materials. The product could catch fire.

Hazardous decomposition products
None.

11. TOXICOLOGICAL INFORMATION
Information on toxicological effects
Toxicological information on main components of the mixture:

<table>
<thead>
<tr>
<th>Substance</th>
<th>a) acute toxicity</th>
<th>LD50 Oral Rat</th>
<th>LC50 Inhalation Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td></td>
<td>7060 mg/kg</td>
<td>124.7 mg/l 4h</td>
</tr>
<tr>
<td>Trade Secret</td>
<td></td>
<td>&gt; 90 ml/kg</td>
<td></td>
</tr>
<tr>
<td>Glycerin</td>
<td></td>
<td>&gt; 21900 mg/kg</td>
<td>&gt; 570 mg/m3 1h</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12600 mg/kg</td>
<td>&gt; 10 g/kg</td>
</tr>
</tbody>
</table>

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity
b) skin corrosion/irritation
c) serious eye damage/irritation
d) respiratory or skin sensitisation
e) germ cell mutagenicity
f) carcinogenicity
g) reproductive toxicity
h) STOT-single exposure
k) Toxicokinetics and distribution
i) STOT-repeated exposure
j) aspiration hazard

Substance(s) listed on the IARC Monographs:
Ethyl Alcohol
Group 1 (in Alcoholic Beverages)
Substance(s) listed as OSHA Carcinogen(s):
Ethyl Alcohol

Substance(s) listed as NIOSH Carcinogen(s):
None

Substance(s) listed on the NTP report on Carcinogens:
Ethyl Alcohol

12. ECOLOGICAL INFORMATION
Toxicity
Adopt good working practices, so that the product is not released into the environment.

Persistence and degradability
Not Available

Bioaccumulative potential
Not Available

Mobility in soil
Not Available

Other adverse effects
Not determined

13. DISPOSAL CONSIDERATIONS
Waste treatment methods
Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Do not dump into sewers, any body of water or onto the ground.
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION
UN number
ADR-UN number: 1170
DOT-UN Number: UN1170
IATA-Un number: 1170
IMDG-Un number: 1170

UN proper shipping name
ADR-Shipping Name: ETHYL ALCOHOL
DOT Proper Shipping Name: Ethanol or Ethyl alcohol or Ethanol solutions or Ethyl alcohol solutions
IATA-Technical name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
IMDG-Technical name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

Transport hazard class(es)
ADR-Class: 3
DOT Hazard Class: 3
IATA-Class: 3
IMDG-Class: 3

Packing group
ADR-Packing Group: III
ADR exempt: III
IATA-Packing group: III
IMDG-Packing group: III

Environmental hazards
Marine pollutant: No
Environmental Pollutant: Not Available

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not Available

Special precautions
Department of Transportation (DOT):
DOT-Special Provision(s): 24, B1, IB3, T2, TP1
DOT Label(s): 3
15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:
All chemical substances in this material are included on or are exempted from listing on the TSCA Chemical Substance Inventory.

Section 313 - Toxic chemical list:
no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:
Ethanol Listed as carcinogen and reproductive toxicant

CANADA:

DSL-list (Canada)
This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation (CPR) and this MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapour.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

Safety Data Sheet dated: 08 April 2020 - version 1
The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet does not constitute a product warranty or specification. It is the responsibility of the recipient of the product to ensure that applicable law is observed in the use of the product.
This SDS cancels and replaces any preceding release.
Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day, (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.
N/A: Not Applicable