Section 1: Identification

Product Name: Havaclean Hand Sanitizer-E  Product Code:H006616
Haviland Products Company        Powered by Plymouth Technology
421 Ann Street NW
Grand Rapids, MI 49504
(616) 361-6691

Emergency Phone:
CHEMTREC: Canada and USA - (800) 424-9300
CHEMTREC: In Mexico - 01-800-681-9531

Product Use: Hand Sanitizer
Not recommended for: NA

Section 2: Hazard(s) Identification

GHS Ratings:

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid</td>
<td>2</td>
</tr>
<tr>
<td>Skin corrosive</td>
<td>3</td>
</tr>
<tr>
<td>Eye corrosive</td>
<td>2B</td>
</tr>
<tr>
<td>Organ toxin single exposure</td>
<td>3</td>
</tr>
<tr>
<td>Organ toxin repeated exposure</td>
<td>1</td>
</tr>
</tbody>
</table>

Flammable liquid 2  Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive 3  Reversible adverse effects in dermal tissue, Draize score: >= 1.5 < 2.3
Eye corrosive 2B  Mild eye irritant: Subcategory 2B, Reversible in 7 days
Organ toxin single exposure 3  Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure 1  Significant toxicity in humans- Reliable, good quality human case studies or epidemiological studies Presumed significant toxicity in humans- Animal studies with significant and/or severe toxic effects relevant to humans at generally low exposure (guidance)

GHS Hazards

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H316</td>
<td>Causes mild skin irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

GHS Precautions

| 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/ventilating/light/equipment |
| P242   | Use only non-sparking tools |
| P243   | Take precautionary measures against static discharge |
| P260   | Do not breathe dust/fume/gas/mist/vapors/spray |
| P261   | Avoid breathing dust/fume/gas/mist/vapors/spray |
| P264   | Wash face, hands, and any exposed skin thoroughly after handling |
| P270   | Do not eat, drink or smoke when using this product |
| P271   | Use only outdoors or in a well-ventilated area |
P280 Wear protective gloves/protective clothing/eye protection/face protection

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P314 Get Medical advice/attention if you feel unwell

P303+P361+P353 If on skin (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

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.

P332+P313 If skin irritation occurs: Get medical advice / attention

P337+P313 If eye irritation persists get medical advice / attention

P370+P378 In case of fire: Use suitable media for extinction

P405 Store locked up

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well ventilated place. Keep cool

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

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**Chemical Name / CAS No.** | **OSHA Exposure Limits** | **ACGIH Exposure Limits** | **Other Exposure Limits**
---|---|---|---
Ethyl alcohol 64-17-5 70% - 80% Vapor Pressure: 42.979 mmHg | 1000 ppm TWA; 1900 mg/m3 TWA | 1000 ppm STEL | NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Glycerin 56-81-5 1% - 5% Vapor Pressure: .002 mmHg | 15 mg/m3 TWA (mist, total particulate); 5 mg/m3 TWA (mist, respirable fraction) | | |
Hydrogen peroxide 7722-84-1 0.1% - 1.0% | 1 ppm TWA; 1.4 mg/m3 TWA | 1 ppm TWA | NIOSH: 1 ppm TWA; 1.4 mg/m3 TWA

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**Section 4: First-aid Measures**
Inhalation
Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

Eye Contact
Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

Skin Contact
Remove contaminated clothing. Wash skin with soap and water. Get medical attention. Wash clothing separately and clean shoes before reuse.

Ingestion
If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5: Fire-fighting Measures

Extinguishing Media

Do not use: Solid water jet ineffective as extinguishing medium.

Specific Hazards Arising from the Chemical
DIRECT FIRE HAZARD. Highly flammable. Gas/vapour flammable with air within explosion limits.
INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits.
INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

Special Protective Equipment and Precautions for Firefighters
Special Information: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA / NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Spill and Leak Procedures

Clean up methods:
Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite or powdered limestone. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

Section 7: Handling and Storage
Handling Procedures
Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use with adequate ventilation. Avoid breathing dusts, mists, and vapors. Do not get in eyes, on skin, or on clothing. Wear eye protection and protective clothing. Wash thoroughly after handling.

Storage Requirements

### Section 8: Exposure Control/Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name / CAS No.</th>
<th>OSHA Exposure Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Other Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol 64-17-5</td>
<td>1000 ppm TWA; 1900 mg/m³ TWA</td>
<td>1000 ppm STEL</td>
<td>NIOSH: 1000 ppm TWA; 1900 mg/m³ TWA</td>
</tr>
<tr>
<td>Glycerin 56-81-5</td>
<td>15 mg/m³ TWA (mist, total particulate); 5 mg/m³ TWA (mist, respirable fraction)</td>
<td>1 ppm TWA</td>
<td>1 ppm TWA NIOSH: 1 ppm TWA; 1.4 mg/m³ TWA</td>
</tr>
<tr>
<td>Hydrogen peroxide 7722-84-1</td>
<td>1 ppm TWA; 1.4 mg/m³ TWA</td>
<td>1 ppm TWA</td>
<td>NIOSH: 1 ppm TWA; 1.4 mg/m³ TWA</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS: Provide ventilation sufficient to maintain exposure below the recommended limits.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SKIN PROTECTION: Wear impervious protective gloves. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Colorless Liquid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>1.6</td>
</tr>
<tr>
<td>Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Boiling range</td>
<td>70°C</td>
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<tr>
<td>Evaporation rate Ether=1</td>
<td>8.3</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>Not Available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 8.5</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete</td>
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<tr>
<td>Flash point</td>
<td>25°C</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not Available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.837</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
Section 10: Stability and Reactivity

Chemical Stability:

STABLE

Incompatible Materials

Strong acids. Strong bases.

Conditions to Avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

Hazardous Decomposition Products


Hazardous Polymerization

Hazardous polymerization will not occur.

Section 11: Toxicology Information

Mixture Toxicity

Inhalation Toxicity LC50: 150mg/L

Component Toxicity

7722-84-1 Hydrogen peroxide
Oral LD50: 801 mg/kg (Rat) Dermal LD50: 4,060 mg/kg (Rat) Inhalation LC50: 2 g/m3 (Rat)

Routes of Entry:

Inhalation
Ingestion
Skin contact
Eye contact

Target Organs

Blood Eyes Kidneys Liver Central Nervous System Reproductive System Skin Respiratory System

Effects of Overexposure

CAS Number Description % Weight Carcinogen Rating
7722-84-1 Hydrogen peroxide 0.1% - 1.0% Hydrogen peroxide:

Section 12: Ecological Information

Component Ecotoxicity

Ethyl alcohol

96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Glycerin 96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/L [static]
Hydrogen peroxide 96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18 - 56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0 - 32.0 mg/L [static]
48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

Section 13: Disposal Considerations
Dispose of in accordance with local, state and federal regulations.

Section 14: Transportation Information
UN Code: 1993
Proper Shipping Name: Flammable liquid, N.O.S. (Ethanol)
Hazard Class: 3
Packing Group: III

Section 15: Regulatory Information
OSHA Process Safety Management Highly Hazardous Chemicals
7722-84-1 Hydrogen peroxide
TSCA 8(b) Inventory
7722-84-1 Hydrogen peroxide
56-81-5 Glycerin
64-17-5 Ethyl alcohol

Country | Regulation | All Components Listed
---|---|---

Section 16: Other Information
Date Prepared: 4/6/2020

Disclaimer
The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.