SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: ServClean Gel Hand Sanitizer

Other means of Identification: 29328

Recommended use of the chemical and restrictions on use: Hand Sanitizing, Personal domestic.

Manufacturer/Supplier: Charlotte Products Ltd.
Address: 2060 Fisher Dr. Peterborough, On K9J 6X6
Telephone: 705-740-2880
Fax: 705-745-1239

24 Hr. Emergency Tel. #: Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International)

SECTION 2 - HAZARDS IDENTIFICATION

Classification of the chemical:
- Flammable Liquids 3
- Eye Damage/Irritation 2A

Label elements:
- Signal Word: Danger

Hazard statement(s)
- H225 Highly Flammable liquid and vapour
- H319 Causes serious eye irritation
- H350 May cause cancer (Ingestion)
- H361 Suspected of damaging the unborn child (Ingestion)
- H370 Causes damage to organs

Precautionary statement(s)
- 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 breathing mist/vapours/spray
- P264 Wash exposed areas thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves/protective clothing/eye protection/face protection
P312 Call a poison center or doctor/physician if you feel unwell
P321 Specific treatment (see section 4 of SDS)
P332+313 If skin irritation occurs: Get medical advice/attention
P337+313 If eye irritation persists, get medical advice/attention
P362 Take off contaminated clothing and wash before reuse
P370+378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction
P403+235 Store in a well-ventilated place. Keep cool
P405 Store locked up
P501 Dispose of contents/container in accordance with local regulation

Hazard pictogram(s)

Other hazards not otherwise classified: None Known

Unknown Acute Toxicity: 0%

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name, Common Name &amp; Synonyms:</th>
<th>CAS #</th>
<th>Concentration %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>65-85</td>
</tr>
<tr>
<td>Hydrogen Peroxide 3%</td>
<td>7722-84-1</td>
<td>4-5</td>
</tr>
<tr>
<td>Glycerine 95%</td>
<td>56-81-5</td>
<td>1.3-2</td>
</tr>
</tbody>
</table>

** If the chemical name/CAS # is “proprietary” and/or the weight % is shown as a range, this information had been withheld as a trade secret.

SECTION 4 - FIRST-AID MEASURES

Description of first aid measures:

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

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, call a poison center or doctor/physician.

Notes to Physician: Severe poisoning occurs when the blood ethanol level is 0.3-0.5%. Above 0.5% the individual will be comatose, and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids. This product contains two ingredients of relatively low toxicity: Hydrogen Peroxide and Glycerine.

Indication of any immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES
Extinguishing media:

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** Not determined

Special hazards arising from the substance or mixture: None known

Flammability classification: Flammable

Hazardous combustion products: Carbon oxides, oxides of phosphorus other unidentified organic compounds.

Special protective equipment and precautions for firefighters:

**Protective equipment for fire-fighters:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

**Special fire-fighting procedures:** Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Dike for water control.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Methods and material for containment and cleaning up:** Do not allow material to contaminate ground water system. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers, or any natural waterway or drinking supply. Ventilate the area. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

**Special spill response procedures:** In case of a transportation accident, contact Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International). If a spill/release in the US is in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8802).

**SECTION 7 - HANDLING AND STORAGE**

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage:** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children.

**Incompatible materials:** Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide. Do not mix with other chemicals or cleaners.

**SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Exposure Limits:</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>CAS #</td>
<td>TWA</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>
Exposure controls:

**Ventilation and engineering measures:** Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection:** If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

**Skin protection:** Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

**Eye face protection:** Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

**Other protective equipment:** Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations:** Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear colourless liquid

**Odor:** Typical ethanol odour

**Odor threshold:** No applicable information available

**pH:** 7.0-8.5

**Melting/Freezing point:** No applicable information available

**Initial boiling point and boiling range:** No applicable information available

**Flash point:** No data available

**Flashpoint (Method):** Tag Closed Cup

**Evaporation rate (BuAe = 1):** Similar to water

**Flammability (solid, gas):** Flammable liquids 3

**Lower flammable limit (% by vol.):** 3.3

**Upper flammable limit (% by vol.):** 19.0

**Vapor pressure:** No applicable information available

**Vapor density:** No applicable information available
Relative density: No applicable information available

Solubility in water: Soluble

Other solubility(ies): No applicable information available

Partition coefficient: No applicable information available

Auto ignition temperature: No applicable information available

 Decomposition temperature: No applicable information available

Viscosity: Slightly viscous.

Volatile organic Compounds (%VOC's): No applicable information available

 Other physical/chemical comments: No applicable information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not normally reactive

Chemical stability: Stable

Possibility of hazardous reactions: No hazardous polymerization

Conditions to avoid: Keep out of reach of children. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. Extremely high temperatures. Open flame.

Incompatible materials: Strong acids, Strong bases.

Hazardous decomposition products: None known. Refer to ‘Hazardous Combustion Products’ in Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - inhalation: Avoid breathing vapors or mists

Routes of entry - eye: Avoid contact with eyes

Routes of entry - Ingestion: Do not taste or swallow

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

   Symptoms: Please see section 4 of this SDS sheet for symptoms.

Potential Chronic Health Effects:

Mutagenicity: Not expected to be mutagenic in humans.

Carcinogenicity: A4 (Not classified for human or animal.) by ACGIH

Reproductive effects: No applicable information available
Sensitization to material: No applicable information available

Specific target organ effects: Classified Development toxin [PROVEN]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE]. It causes damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS).

Medical conditions aggravated by overexposure: Pre-existing skin or eye disorders.

Toxicological data:

See the following table for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>LD$_{50}$ (Oral, rat)</th>
<th>LD$_{50}$ (Dermal, Rabbit)</th>
<th>LC$_{50}$ (4hr, Inhal., rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>7060 mg/kg</td>
<td>20000 mg/kg</td>
<td>31623 ppm</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*All empty cells no applicable information available

Other important toxicological hazards: None reported.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No applicable information available

Persistence and degradability: No applicable information available

Bioaccumulation potential: No applicable information available.

Mobility in soil: No applicable information available.

Other Adverse Environmental effects: No applicable information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for disposal: Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

Methods of disposal:Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

Special Shipping Information: Keep from freezing.

T.D.G. Classification: UN1987, FLAMMABLE LIQUIDS, N.O.S. (Ethanol Hand Sanitizer), Class 3 PG III

SECTION 15 - REGULATORY INFORMATION
TSCA information: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

SECTION 16 - OTHER INFORMATION

Legend:
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
CSA: Canadian Standards Association
DOT: Department of Transportation
ECOTOX: U.S. EPA Ecotoxicology Database
EINECS: European Inventory of Existing Commercial chemical Substances
EPA: Environmental Protection Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IUCLID: International Uniform Chemical Information Database
LC: Lethal Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OECD: Organization for Economic Cooperation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet Material Safety Data Sheet
STEL: Short Term Exposure Limit
TOG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Prepared By: Charlotte Technical Services Group   Tel: (705) 740 2880

DISCLAIMER

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of this supplier, it is assumed that users of this material have been fully trained accordingly to the mandatory requirements of GHS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained within this form.

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