Date: March 12, 2019

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: ServClean Sanitize

Other means of Identification: 29319

Recommended use of the chemical and restrictions on use: For professional use only.

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:

Acute Toxicity Inhalation 4

Skin Corrosion/Irritation 1

Eye Damage/Irritation 1

Specific Target Organ Toxicity (Single Exposure) 2

Label elements:

Signal Word: Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H332 Harmful if inhaled

H371 May cause damage to organs

Precautionary statement(s)

| P260 | Do not breathe dust/fume/gas/mist/vapours/spray |
|------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray |
| P264 | Wash exposed areas 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

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing

P309+311 IF exposed or you feel unwell: Call a poison center or doctor/physician

P310 Immediately call a poison center or doctor/physician
P312 Call a poison center or doctor/physician if you feel unwell

P321 Specific treatment (see section 4 of SDS)
P363 Wash contaminated clothing before reuse

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

| Chemical Name, Common Name & Synonyms: | CAS# | Concentration % | |
|--|------------|-----------------|--|
| Alkyl dimethyl ethylbenzyl ammonium chloride | 85409-23-0 | 3-7 | |
| Alkyl dimethyl benzyl ammonium chloride | 68391-01-5 | 3-7 | |
| Ethanol | 64-17-5 | 1-5 | |
| Alkyldimethyl amines -C12-18 | 68391-04-8 | 0.1-1 | |

^{**} 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 on skin (or hair): Take off all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician.

Most Important symptoms and effects, both acute and delayed: Causes severe skin burns and eye damage. Harmful if inhaled. May cause damage to organs.

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: Not 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 spilt/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: If a spill/release in the US 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/fumes/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: Oxidizing agents. Do not mix with other chemicals or cleaners.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

| Exposure Limits: | | | | | |
|--|------------|-----------|------|----------|------|
| | | ACGIH TLV | | OSHA PEL | |
| Chemical Name | CAS# | TWA | STEL | PEL | STEL |
| Alkyl dimethyl ethylbenzyl ammonium chloride | 85409-23-0 | | | | |

| Alkyl dimethyl benzyl ammonium chloride | 68391-01-5 | | | |
|---|------------|----------|----------|--|
| Ethanol | 64-17-5 | 1000 ppm | 1000 ppm | |
| Alkyldimethyl amines -C12-18 | 68391-04-8 | | | |

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: In case of insufficient ventilation, wear suitable respiratory equipment. Advice should be sought from respiratory protection specialists.

Skin protection: Wear protective gloves. 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 vapors 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 colorless liquid

Odor: None

Odor threshold: No applicable information available

pH: 7.2-8.2

Melting/Freezing point: No applicable information available

Initial boiling point and boiling range: No applicable information available

Flash point: None to boiling

Flashpoint (Method): No applicable information available

Evaporation rate (BuAe = 1): Similar to water

Flammability (solid, gas): Not flammable

Lower flammable limit (% by vol.): Not Flammable

Upper flammable limit (% by vol.): Not Flammable

Vapor pressure: No applicable information available

Vapor density: No applicable information available

Relative density: ~0.99

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: Similar to water

Volatile organic Compounds (%VOC's): None

Other physical/chemical comments: No applicable information available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

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.

Incompatible materials: Fluorine, strong oxidizing or reducing agents, bases, metals, sulfur trioxide, phosphorus pentoxide

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 - skin & eye: Avoid contact with skin or 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: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive effects: This product is not expected to cause reproductive or developmental effects.

Sensitization to material: This product is not expected to cause skin sensitization

Specific target organ effects: Alkyl dimethyl ethylbenzyl ammonium chloride, Alkyl dimethyl benzyl ammonium chloride, Alkyldimethyl amines -C12-18 known to cause liver damage over prolonged or repeated exposures

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

Toxicological data:

See the following table for individual ingredient acute toxicity data.

| Chemical name | CAS# | LD ₅₀ | LD ₅₀ | LC ₅₀ | |
|--|------------|------------------|------------------|--------------------|--|
| | | (Oral, rat) | (Dermal. Rabbit) | (4hr, Inhal., rat) | |
| Alkyl dimethyl ethylbenzyl ammonium chloride | 85409-23-0 | | | | |
| Alkyl dimethyl benzyl ammonium chloride | 68391-01-5 | 344 mg/kg | >2000 mg/kg | 0.054-0.51 mg/L | |
| Ethanol | 64-17-5 | | 8 8 | <i>B</i> | |
| Alkyldimethyl amines -C12-18 | 68391-04-8 | | | | |

^{*}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 other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal: Rinse the emptied container thoroughly. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the Manufacturer.

Methods of disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container promptly after emptying.

For containers 5 gallons or less: Triple rinse as follows: Fill container ¼ full with water and recap. Agitate vigorously. Follow Pesticide Disposal instruction for rinsate disposal. Drain for 10 seconds after the flow begins to drip. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

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.

TDG Classification: UN1760, CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds), Class 8, PGIII

Special Provisions: 16

Explosive Limit and Limited Quantity Index: 5 L

ERAP Index: None

SECTION 15 - REGULATORY INFORMATION

EPA/Health Canada Statement

This chemical is registered by the Environmental Protection Agency/Health Canada and is subject to certain labeling requirements by law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. For more information see product label.

PRECAUTIONS - KEEP OUT OF REACH OF CHILDREN.

WARNING: Skin and eye irritant. Harmful if swallowed. Do not mix with any other chemical. Avoid contact with undiluted product. Avoid contamination of food. Do not store in food processing or food storage areas.

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 Co operation 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.