SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: ES128 - Disinfectant

Other means of Identification: ES128

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:
Flammable liquid 4
Skin Corrosion/Irritation 1
Eye Damage/Irritation 1

Label elements:

Signal Word: Danger

Hazard statement(s)
H227	Combustible liquid
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Precautionary statement(s)
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P264	Wash exposed areas thoroughly after handling
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
P310	Immediately call a poison center or doctor/physician
P321	Specific treatment (see section 4 of SDS)
P363	Wash contaminated clothing before reuse
In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction

Store in a well ventilated place. Keep cool

Store locked up

Dispose of contents/container in accordance with local regulation

**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 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>Didecyl dimethyl ammonium chloride</td>
<td>7173-51-5/64-17-5/7732-18-5</td>
<td>5-10</td>
</tr>
</tbody>
</table>

### 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): Immediately 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.

**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 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 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: Oxidizing agents. Do not mix with other chemicals or cleaners.

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

<table>
<thead>
<tr>
<th>Exposure Limits:</th>
<th>ACGIH TLV</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>CAS #</td>
<td>TWA</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>7173-51-5/64-17-5/7732-18-5</td>
<td></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: Not required with normal use. If airborne concentrations are above the permissible exposure limit or irritation occurs, 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: 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 and eyes. 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.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Clear, colorless liquid

Odor: Bland

Odor threshold: No applicable information available

pH: 6-8

Melting/Freezing point: No applicable information available

Initial boiling point and boiling range: No applicable information available

Flash point: No applicable information available

Flashpoint (Method): No applicable information available

Evaporation rate (BuAe = 1): No applicable information available

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: ~1

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: Water thin.

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.

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: No applicable information available

Reproductive effects: No applicable information available

Sensitization to material: No applicable information available

Specific target organ effects: No data available to indicate product or components will have specific target organ effects.

Medical conditions aggravated by overexposure: Pre-existing skin, eye or respiratory conditions

Toxicological data:
See the following table for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>LD₅₀ (Oral, rat)</th>
<th>LD₅₀ (Dermal, Rabbit)</th>
<th>LC₅₀ (4hr, Inhal., rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>7173-51-5/64-17-5/7732-18-5</td>
<td>238 mg/kg</td>
<td>3342 mg/kg</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 vapor) 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.

DOT
UN number: 1903
Proper shipping name: Disinfectants, liquid, corrosive n.o.s. (Didecyldimethylammonium Chloride)
Transport hazard class: 8
Packing group: III
Labels: 8
Explosive Limit and Limited Quantity Index: 5 L
Emergency Response Guidebook Number: 153
Environmental hazards: no

TDG
UN number: 1903
Proper shipping name: DISINFECTANT, LIQUID, CORROSIVE, N.O.S (Didecyldimethylammonium Chloride)
Transport hazard class: 8
Packing group: III
Labels: 8
Explosive Limit and Limited Quantity Index: 5 L
SECTION 15 - REGULATORY INFORMATION

PRECAUTIONS
KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Harmful if swallowed. Avoid contamination of food.

FIRST-AID: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse. If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately. Take container, label or product name and product registration number with you when seeking medical attention.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

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.

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.