Date: March 11, 2019

SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier used on the label: ES364 Neutral Disinfectant

Other means of Identification: ES364

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:

Eye Damage/Irritation 1

Skin Corrosion/Irritation 1B

Acute Toxicity Inhalation 2

Acute Toxicity Dermal 3

Acute Toxicity Oral 4

Label elements:

Signal Word: Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage

H330 Fatal if inhaled

H311 Toxic in contact with skin H302 Harmful if swallowed

Precautionary statement(s)

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
P301+312+331 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Immediately take off all contaminated clothing. Rinse skin with

water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P362 Take off contaminated clothing and wash 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: 9.25%

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name, Common Name & Synonyms:	CAS#	Concentration %
Dioctyl Dimethyl Ammonium Chloride	5538-94-3	5-10
Alkyl (C ₁₂ 67%, C ₁₄ 25%, C ₁₆ 7%, C ₁₈ 1%) Dimethyl Benzyl	68391-01-5	1-5
Ammonium Chloride		
N-Coco-N,N,N-trimethylammonium Chloride	61789-18-2	5-10

^{**} 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): Immediately take off all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

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, fatal if inhaled, toxic if in contact with skin and harmful if swallowed

Indication of any immediate medical attention and special treatment needed: Treat symptomatically, probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Water spray, dry powder or foam.

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. 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: Fluorine, strong oxidizing or reducing agents, bases, sulfur trioxide, phosphorus pentoxide. 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
Dioctyl Dimethyl Ammonium Chloride	5538-94-3				
Alkyl (C ₁₂ 67%, C ₁₄ 25%, C ₁₆ 7%, C ₁₈ 1%) Dimethyl Benzyl Ammonium Chloride	68391-01-5				

N-Coco-N,N,N-trimethylammonium 61	1789-18-2		
Chloride			

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 the case of vapor formation use a respirator with an approved filter. 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: Wear chemical resistant 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 Green Liquid

Odor: Lemon

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: >99 °C

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: 0.989-0.999

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, kinematic: 2.024 mm2/s@ 25° C

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, sulfur trioxide, phosphorus pentoxide. Do not mix with other chemicals or cleaners.

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

SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Information on likely routes of exposure:</u>

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:

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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.

Chemical name	CAS#	LD ₅₀	LD ₅₀	LC ₅₀
		(Oral, rat)	(Dermal. Rat)	(Inhal., rat)
Dioctyl Dimethyl Ammonium Chloride	5538-94-3			
Alkyl (C ₁₂ 67%, C ₁₄ 25%, C ₁₆ 7%, C ₁₈ 1%) Dimethyl Benzyl Ammonium Chloride	68391-01-5	1140 mg/kg	> 250 mg/kg	< 0.59 mg/l
N-Coco-N,N,N-trimethylammonium Chloride	61789-18-2			

^{*}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:

Ozone-Depletion Potential:

Regulation:

US. EPA Clean Air Act (CAA) Section 602 Ozone-

Depleting Substances (40 CFR 82, Subpt. A, App A & B)

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App. A + B).

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. (Cocoalkyltrimethylammoniumchloride)

Transport hazard class: 8

Packing group: III

Labels: 8

Emergency Response Guidebook Number: 153

Environmental hazards: no

TDG

UN number: 1760

Proper shipping name: CORROSIVE LIQUID, N.O.S. (Cocoalkyltrimethylammoniumchloride)

Transport hazard class: 8

Packing group: III

Labels: 8

Environmental hazards: no Special precautions for user: none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15 - REGULATORY INFORMATION

TSCA list

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

Signal word: DANGER!

Hazard statements: Corrosive. Causes skin burns.

EPA No.: 6836-366-67205

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	Cas No.	Component RQ (lbs)	Calculated product RQ (lbs)
Edetic acid	60-00-4	5000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components	Cas No.	Component RQ (lbs)
Edetic acid	60-00-4	5000

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components	Cas No.	Concentration
Edetic acid	60-00-4	

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

Components	Cas No.
Edetic acid	60-00-4

Pennsylvania Right To Know

Components	Cas No.
N-Coco-N,N,N-trimethylammonium Chloride	61789-18-2
Alkyl (C ₁₂ 67%, C ₁₄ 25%, C ₁₆ 7%, C ₁₈ 1%) Dimethyl Benzyl Ammonium Chloride	68391-01-5
Dioctyl Dimethyl Ammonium Chloride	5538-94-3
Tetrasodium ethylenediaminetetraacetate	64-02-8
Edetic acid	60-00-4

New Jersey Right To Know

Components	Cas No.
N-Coco-N,N,N-trimethylammonium Chloride	61789-18-2
Alkyl (C ₁₂ 67%, C ₁₄ 25%, C ₁₆ 7%, C ₁₈ 1%) Dimethyl Benzyl Ammonium Chloride	68391-01-5

Dioctyl Dimethyl Ammonium Chloride	5538-94-3
Tetrasodium ethylenediaminetetraacetate	64-02-8
Edetic acid	60-00-4

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

TDG: 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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