

SAFETY DATA SHEET

IMPORTANT: Read this SDS before handling & disposing of this product.
Pass this information on to employees, customers, & users of this product.

SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY:	Disinfecting Detergent
PRODUCT USES:	Heavy Duty Cleaner, Disinfectant
COMPANY IDENTITY:	Biosolutions LLC
COMPANY ADDRESS:	1800 Industrial Park Drive
COMPANY CITY:	Grand Haven, MI 49417
COMPANY PHONE:	1-616-846-1210
EMERGENCY PHONE:	1-800-424-9300 (U.S.)
CHEMTREC	1-703-527-3887 (outside the U.S.)

SECTION 2. HAZARDS IDENTIFICATION

2.1 HAZARD STATEMENTS: (CAT = Hazard Category)

Physical Hazards:	None known	
Health Hazards:	Acute Toxicity, Oral	Category 4
	Acute Toxicity, Dermal	Category 4
	Skin corrosion/irritation	Category 2
	Eye Corrosion/irritation	Category 3
Environmental Hazards:	None Known	
OSHA defined Hazards Label Elements	<i>Not classified</i>	



Signal Word

Danger

Hazard Statement

Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye damage.

2.2 PRECAUTIONARY STATEMENTS:

Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Causes skin irritation and serious eye damage. Harmful if swallowed.

PREVENTION:

Do not get in eyes, on skin, or on clothing. Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye, face and foot protection.

RESPONSE:

IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Remove immediately all contaminated clothing. Rinse skin with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 or doctor/physician. Wash contaminated clothing before reuse

STORAGE:

No special requirements.

DISPOSAL:

Dispose of the contents/container in accordance with local, regional, national, and international regulation.

Hazard(s) not otherwise classified (HNOC)

None Known

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	WT %
Didecyldimethylammonium Chloride	7173-51-5	4.2-4.4%
Quaternary Ammonium compounds, Benzyl-C12-C16-Alkyldimethyl, Chlorides	68424-85-1	4.2-4.4%

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

SECTION 4. FIRST AID MEASURES

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Take off immediately all contaminated clothing. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media	Water Fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable Extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific Hazards arising from the chemical	Vapors may form explosive mixtures in air.
Special protective equipment	Self-Contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire do not breath fumes.
Specific methods	Use standard firefighting procedures and consider the hazards of the other involved materials.
General fire hazards	None Known

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, emergency procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS
Methods and materials for containment and cleaning up	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece, mop). Clean surface thoroughly to remove residual contamination.</p>
Environmental precautions	Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, Water courses or onto the ground.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Avoid releases to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a cool, dry place out of direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Biological Limit values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and an emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/Face protection

Wear safety glasses with side shields (or goggles). Face shield is recommended.

Skin protection

Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Clear, and Red
ODOR:	Characteristic Odor
ODOR THRESHOLD:	Not Available
pH (Neutrality):	7.0-8.5
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	Not Available
FLASH POINT (TEST METHOD):	Not Available
EVAPORATION RATE (n-Butyl Acetate=1):	Not Available
FLAMMABILITY CLASSIFICATION:	Non Flammable Hazard
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C / 68 F:	Not Available
VAPOR DENSITY (air=1):	Not Available
GRAVITY @ 68/68 F / 20/20 C:	
SPECIFIC GRAVITY (Water=1):	1.00 g/mL
POUNDS/GALLON:	8.35 lb/gal
WATER SOLUBILITY:	Soluble
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Available
DECOMPOSITION TEMPERATURE:	Not Available
VOCs (>0.044 Lbs/Sq In) :	Not Available
TOTAL VOC'S (TVOC)*:	Not Available
NONEXEMPT VOC'S (CVOC)*:	Not Available
HAZARDOUS AIR POLLUTANTS (HAPS):	Not Available
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C) 0.0	
VISCOSITY @ 20 C (ASTM D445):	Not Available
VOLATILE %:	Not Available

* Using CARB (California Air Resources Board Rules).

SECTION 10. STABILITY & 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 dangerous reactions known under conditions of normal use
Conditions to avoid	None known
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	No hazardous decomposition products are known

SECTION 11. TOXICOLOGICAL INFORMATION

Ingestion	Harmful if swallowed. Causes burns/serious damage to mouth, throat and stomach. Symptoms may include vomiting, nausea, and/or feeling of general unwellness.
Inhalation	May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.
Skin Contact	Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.
Eye Contact	Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash. Skin irritation. May cause Redness and Pain . May cause an allergic skin reaction.

Information on toxicological effects

Acute toxicity	Toxic if swallowed	
Didecyldimethylammonium Chloride		(CAS 7173-5105)
Dermal LD50:	3342 mg/kg	Rat: >1000mg/kg
Oral LD50:	238 mg/kg	Rat: 329mg/kg
Quaternary Ammonium Compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides		(CAS 68424-85-1)
Dermal LD50:	3560	
Oral LD50:	430	

Skin Corrosion/irritation Causes skin irritation.

Serious eye damage/Eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory sensitization Not available.

Skin sensitization Not available

Germ Cell mutagenicity No data available to indicate product or any components present at greater than .01% are mutagenic or genotoxic

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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

Specific target organ toxicity -Single Exposure Not Classified.

Specific target organ toxicity -Repeated exposure Not Classified.

Aspiration hazard Not available.

Chronic Effects Prolonged inhalation may be harmful.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life

Persistence and degradability No data is available on the degradability of this product

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse 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

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal. ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES.

SECTION 14. TRANSPORT INFORMATION

MARINE POLLUTANT: No

DOT/TDG SHIP NAME: Not regulated as dangerous goods

IATA / ICAO: Not regulated as dangerous goods

IMO / IMDG: Not regulated as dangerous goods

SECTION 15. REGULATORY INFORMATION

TSCA section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not Regulated

CERCLA hazardous Substance List (40 CFR 302.4)

Not listed

SARA 304 Emergency release notification

Not Regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories

Immediate Hazard- No

Delayed Hazard- No

Fire Hazard- No

Pressure Hazard- No

Reactivity Hazard- NO

SARA 302 Extremely hazardous substance

Not Listed

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not Regulated

Safe Drinking Water Act (SDWA)

Not regulated

State regulations

US. Massachusetts RTK- Substance List

Not regulated

US. New Jersey Worker and Community Right-to-Know Act

Not regulated

US. Pennsylvania Worker and Community Right-to-Know Law

Not regulated

US. Rhode Island RTK

Not regulated

US. California Proposition 65

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

SECTION 16. OTHER INFORMATION

Issue Date

3/20/17

Version #

01

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness or a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.