SAFETY DATA SHEET

RELIABLE NEUTRAL DISINFECTANT CLEANER

Section 1. Identification

Product name Product code : RELIABLE NEUTRAL DISINFECTANT CLEANER : V03395, V03396

Relevant identified uses of the substance or mixture and uses advised against

Identified uses		
Disinfectant.		
Uses advised against		
Not applicable.		
Supplier	: VERITIV CANADA, INC MISSISSAUGA,ON L5W 0H1 844-837-4848	
Emergency telephone number (with hours of operation)	: 1-888-CAN-UTEC (226-8832), (613) 996-6666 or *666 on a cellular phone	
Section 2. Hazar	d identification	

Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage.
Precautionary statements	
Prevention	 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
Response	: P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.
Date of issue/Date of revision	: 2017 Date of previous issue : 2017 December 4 Version : 3.03 1/11 December 4



Section 2. Hazard identification

	P305 + P351 + P338 + P310 - 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 physician.
Storage	: P405 - Store locked up.
Disposal	 P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture		
Ingredient name	% (w/w)	CAS number
quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	3 - 5	68424-85-1
decyldimethyloctylammonium chloride	3 - 5	32426-11-2
didecyldimethylammonium chloride	1 - 3	7173-51-5
dimethyldioctylammonium chloride	1 - 3	5538-94-3
Ethanol	1 - 1.5	64-17-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary firs	t aid measures
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First-aid measures

Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or
	waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effe	<u>s</u>	
Eye contact	: Causes s	serious eye damage.
Inhalation	: No know	n significant effects or critical hazards.
Skin contact	: Causes s	severe burns.
Ingestion	: Harmful	if swallowed.
Over-exposure signs/sym	<u>oms</u>	
Eye contact	: Adverse pain watering redness	symptoms may include the following:
Inhalation	: No speci	fic data.
Skin contact	pain or ir redness	symptoms may include the following: ritation may occur
Ingestion	: Adverse stomach	symptoms may include the following: pains
Indication of immediate me	cal attentio	n and special treatment needed, if necessary
Notes to physician		of inhalation of decomposition products in a fire, symptoms may be delayed. Dised person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No speci	fic treatment.
Protection of first-aiders	is suspeo mask or	n shall be taken involving any personal risk or without suitable training. If it cted that fumes are still present, the rescuer should wear an appropriate self-contained breathing apparatus. It may be dangerous to the person aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media		
Suitable extinguishing media	1	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	1	None known.

thoroughly with water before removing it, or wear gloves.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	:tiv	e equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	onta	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering : controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure : controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	

Section 8. Exposure controls/personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Color	:	Colorless.
Odor	:	Odorless.
Odor threshold	:	Not available.
рН	:	6 to 6.2
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Not available.
(flammable) limits		
Vapor pressure	:	Not available.
Vapor density	1	Not available.
Relative density	:	Not applicable.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	4	Not available.
Decomposition temperature	1	Not available.
Viscosity	:	Not available.
Flow time (ISO 2431)	:	Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients	3.
Chemical stability	: The product is stable.	
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: No specific data.	
Incompatible materials	: No specific data.	
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity				
Product/ingredient name	Result	Species	Dose	Exposure
quaternary ammonium compounds, benzyl- C8-18-alkyldimethyl, chlorides	LD50 Oral	Rat	426 mg/kg	-
tetrasodium ethylene diamine tetraacetate	LD50 Oral	Rat	10 g/kg	-
didecyldimethylammonium chloride	LD50 Oral	Rat	84 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
quaternary ammonium compounds, benzyl- C8-18-alkyldimethyl, chlorides	Skin - Severe irritant	Rabbit	-	25 milligrams	-
tetrasodium ethylene diamine tetraacetate	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
didecyldimethylammonium chloride	Skin - Severe irritant	Rabbit	-	500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Section 11. Toxicological information

	ological information
Teratogenicity	
Not available.	
Specific target organ toxic	<u>ity (single exposure)</u>
Not available.	
Specific target organ toxic	<u>ity (repeated exposure)</u>
Not available.	
Aspiration hazard	
Not available.	
Information on the likely routes of exposure	: Not available.
Potential acute health effect	t <u>s</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns.
Ingestion	: Harmful if swallowed.
Symptoms related to the ph	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Delayed and immediate effe	cts and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health ef Not available.	<u>fects</u>
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutaganiaity	No known circificant offects or critical benerals

- Mutagenicity : No known significant effects or critical hazards.
- **Teratogenicity** : No known significant effects or critical hazards.

Section 11. Toxicological information

Developmental effects

: No known significant effects or critical hazards.

Fertility effects : No known signi

: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
quaternary ammonium compounds, benzyl- C8-18-alkyldimethyl, chlorides	Acute EC50 37 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 4.15 ppb Marine water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 32.2 ppb	Fish - Pimephales promelas	34 days
tetrasodium ethylene diamine tetraacetate	Acute LC50 486000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
didecyldimethylammonium chloride	Acute EC50 110 µg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	72 hours
	Acute EC50 14.22 ppb Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 18 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 39 µg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 0.01 µg/l Fresh water	Fish - Acipenser transmontanus - Larvae	96 hours
	Chronic NOEC 25 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Chronic NOEC 125 µg/l Fresh water	Daphnia - Daphnia magna	21 days
dimethyldioctylammonium chloride	Acute EC50 0.1 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.7 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
tetrasodium ethylene diamine tetraacetate	5.01	1.8	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 12. Ecological information

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable 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 or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	DOT Classification	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

Canadian lists

Canadian NPRI	: The following components are listed: Ethanol
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: All components are listed or exempted.
International lists	
United States	: All components are listed or exempted.

Section 16. Other information

<u>History</u>	
Date of printing	: 2017 December 5
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Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations HPR = Hazardous Products Regulations

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Expert judgment
SKIN CORROSION - Category 1B	Expert judgment
SERIOUS EYE DAMAGE - Category 1	Expert judgment

Indicates information that has changed from previously issued version.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.