MSDS ID: VEL-034

DECON-QUAT[®] 200 V

Sterile Pharmaceutical Clean Room Formula

MATERIAL SAFETY DATA SHEET



Veltek Associates, Inc. 15 Lee Boulevard Malvern, PA 19355-1234 T: 610-644-8335 F: 610-644-8336 www.sterile.com

*** Section 1 - Chemical Product and Company Identification ***

Material Name: DECON-QUAT® 200 V

Manufacturer Information

Veltek Associates, Inc. 15 Lee Blvd. Malvern, PA USA 19355-1234 Phone: 610-644-8335 Fax: 610-644-8336

(Emergency) FIRST RESPONDERS:

For Spill/Exposure Emergency Response Service from the USA and Canada in English, Spanish, Portuguese, French, and Dutch call CARECHEM24 at 866-928-0789. For Arabic call 011-44-1235-239-671, for Chinese call 011-86-10-5100-3039.

*** Section 2 - Hazards Identification ***

Emergency Overview

This product is a clear, colorless to straw-colored liquid. Corrosive to the eyes, respiratory system, skin, and gastrointestinal tract.

Potential Health Effects: Eyes

Causes burns and may result in permanent injury to eyes, including blindness.

Potential Health Effects: Inhalation

Harmful if inhaled. Mists and vapors may irritate the throat and respiratory tract. High vapor concentrations may cause central nervous system effects. Symptoms may include headaches, dizziness, and drowsiness.

Potential Health Effects: Skin

Causes corrosive burns. Brief exposure may cause irritation and defatting of the skin. Exposures not promptly washed off may lead to toxic effects similar to ingestion. Harmful if absorbed through the skin.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal irritation, swelling of the larynx, difficulty in breathing, circulatory shock, convulsions, and possibly death.

HMIS Ratings: Health: 3 **Fire:** 0 **Physical Hazard:** 0 **Personal Protective Equipment:** B (Ask supervisor or safety specialist for handling instructions.)

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component/CAS #	Percent
7173-51-5	Didecyldimethylammonium chloride	10-13
68424-85-1	Alkyl (C12-16) dimethylbenzylammonium chloride	8-10
64-02-8	Tetrasodium EDTA	1-8
68439-46-3	Alcohols, C9-11, ethoxylated	1-8
77-92-9	Citric acid	0.675-0.825

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

This product is a controlled product according to Canada's Controlled Product Regulation.

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Material Name: DECON-QUAT® 200 V

Immediately flush eyes with water for at least 15-20 minutes, while holding eyelids open. Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention at once.

First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further medical advice.

First Aid: Skin

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

First Aid: Ingestion

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless instructed to do so by the poison control center or doctor. Never give anything by mouth to a victim who is unconscious or is having convulsions.

First Aid: Notes to Physician

Probable mucosal damage may contraindicate the use of gastric lavage.

* * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Product does not burn when heated to 221°F (105°C).

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog. Use methods for the surrounding fire.

Specific Hazards Arising From the Chemical

Irritating and toxic gases or fumes may be released during a fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus. Use water to cool fire-exposed containers and to protect personnel.

NFPA Ratings: Health: 3 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this is without risk. Block any potential routes to water systems.

Clean-Up Procedures

Isolate area. Keep unnecessary personnel away. Keep upwind of the spilled material and isolate exposure. Keep out of low areas where vapor may accumulate. Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate closed spaces before entering. All equipment used when handling the product must be grounded. Floor will be slippery. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Absorb or cover with dry earth, sand or other non-combustible material and transfer to container. Dike far ahead of liquid spill for later disposal. Pump into containers for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Follow facility procedures for corrosive materials.

*** Section 7 - Handling and Storage ***

Handling Procedures

Do not get this material in contact with skin or eyes. Do not inhale vapors or mists of this product. When using this material, do not eat, drink or smoke. Wash thoroughly after handling. Keep container closed. Use good industrial hygiene practices in handling this material.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place away from incompatible materials and sunlight. Do not reuse containers. Do not freeze. Do not handle or store near an open flame, heat or other sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

ACGIH, OSHA, NIOSH or the provinces of Canada have not developed exposure limits for any of this product's components.

Engineering Controls

Local exhaust is suggested for use in enclosed spaces where atomization from spray cleaning application may exist.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

Chemical resistant gloves should be used at all times when handling this product. Use of a chemical resistant apron is recommended. Rubber or neoprene is recommended.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit. Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposure. Respiratory protection may be needed for non-routine or emergency situations.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material. Eyewash fountains and emergency showers are required.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Clear, colorless to straw-colored liquid	Odor:	Organic
Physical State:	Liquid	pH:	7.31
Vapor Pressure:	Not available	Vapor Density:	Not available
Boiling Point:	Not available	Melting Point:	Not available
Solubility (H2O):	Not available	Specific Gravity:	1.006 (water=1)
Bulk Density:	8.35 lbs/gal	Evaporation Rate:	Not available
Viscosity:	13.6 mm2/s(cST) at 22°C	VOC:	20% (approximate)
Flash Point:	None when heated to 221°F (105°C)	Odor Threshold:	Not available
Flash Point Method:	Tag Closed Cup	Oxidizing Properties:	None
Lower Flammability Limit (LFL):	Not determined	Octanol/H2O Coeff.:	Not available
Upper Flammability Limit (UFL):	Not determined	Explosive Properties:	None
Auto Ignition:	Not available	Sensitivity to Static Discharge:	No
Flammability Class:	IIIB	Sensitivity to Mechanical Impact:	No

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*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials.

Incompatibility

Strong oxidizing agents, reducing agents

Hazardous Decomposition

Carbon monoxide, carbon dioxide, and toxic hydrogen chloride vapors.

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

Acute exposure may cause eye and skin irritation, damage or corrosion. Harmful or fatal if swallowed. Inhalation of product may be corrosive to the lungs.

Although poorly absorbed if sufficient amounts are ingested, EDTA and its salts may chelate trace metals if they are present in the intestine. This may cause increased absorption and total body stores of these metals.

B: Component Analysis - LD50/LC50

Didecyldimethylammonium chloride (7173-51-5)

Oral LD50 Rat 84 mg/kg

Alkyl (C12-16) dimethylbenzylammonium chloride (68424-85-1)

Oral LD50 Rat 426 mg/kg

Tetrasodium EDTA (64-02-8)

Oral LD50 Rat 10 g/kg

Alcohols, C9-11, ethoxylated (68439-46-3)

Oral LD50 Rat 1378 mg/kg; Dermal LD50 Rabbit >2 g/kg

Citric acid (77-92-9)

Oral LD50 Rat 3000 mg/kg

Repeated Dose Effects

Repeated doses of Tetrasodium EDTA may cause damage to kidneys and bone marrow.

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Target Organ Effects

Eyes, Skin, Respiratory Tract, Gastrointestinal Tract.

* * * Section 12 - Ecological Information * * *							
Ecotoxicity							
A: General Product Information							
Components may be toxic to aquat	ic life.						
B: Component Analysis - Ecotoxicity - A	quatic Toxicity						
Tetrasodium EDTA (64-02-8)							
Test & Species		Conditions					
96 Hr LC50 Lepomis macrochirus	41 mg/L	Static					
96 Hr LC50 Pimephales promelas	59.8 mg/L	Static					
72 Hr EC50 Desmodesmus subspicatus	1.01 mg/L						
24 Hr EC50 Daphnia magna	610 mg/L						
Citric acid (77-92-9)							
Test & Species		Conditions					
96 Hr LC50 Lepomis macrochirus	1516 mg/L	Static					
72 Hr EC50 Daphnia magna	120 mg/L						
Environmental Fate							
This product is biodegradable.							
Persistence & Degradability							
Hazardous short term degradation	products are not lil	kely. Long term degradation products may occur.					
* * * Sect	ion 13 - Dispos	sal Considerations * * *					
US EPA Waste Number & Descriptions							
A: General Product Information							
Wastes must be tested using metho	ods described in 4	0 CFR Part 261 to determine if it meets applicable definitions					
of hazardous wastes.							
B: Component Waste Numbers							
No EPA Waste Numbers are applic	able for this produ	ct's components.					
Disposal Instructions							
•	g to Local, State, F	Federal, and Provincial Environmental Regulations.					
•	-	8 for Personal Protective Equipment recommendations.					
* * * Section	on 14 - Transpo	ortation Information * * *					
US DOT Information	•						

Shipping Name: Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound) UN/NA #: UN1903 Hazard Class: 8 Packing Group: III

Required Label(s): Corrosive

Additional Info.: This product may ship as a "Consumer Commodity" and be reclassed as "ORM-D" if packaged in <1.3 gallon (5.0 liters) containers (Non-Hazardous).

TDG Information

Shipping Name: Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound) UN/NA #: UN1903 Hazard Class: 8 Packing Group: III Required Label(s): Corrosive

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

While all ingredients are listed on the TSCA Inventory, this product is regulated as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and not subject to the TSCA Inventory rules for FIFRA uses.

B: Component Analysis

None of this products components are listed under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

SARA 311/312 Acute Health: Yes Chronic Health: No Fire: No Pressure: No Reactive: No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Canadian WHMIS Information

A: General Product Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by CPR.

WHMIS Classification: Class E, Corrosive Material.

B: Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

A: General Product Information

No additional information available.

B: Component Analysis - Inventory

Component/CAS #	CAS #	TSCA	CAN	EEC
Didecyldimethylammonium chloride	7173-51-5	Yes	DSL	EINECS
Alkyl (C12-16) dimethylbenzylammonium chloride	68424-85-1	Yes	DSL	EINECS
Tetrasodium EDTA	64-02-8	Yes	DSL	EINECS
Alcohols, C9-11, ethoxylated	68439-46-3	Yes	DSL	No
Citric acid	77-92-9	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

No additional information available.

MSDS History

Revision 1.0000, New MSDS: 01 February 2011.

Material Name: DECON-QUAT® 200 V

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; CFR = Code of Federal Regulations; CNS = Central Nervous System; DSL = Domestic Substances List; EC50 = Effective Concentration 50%; EINECS = European Inventory of Existing Commercial Chemical Substances; EPA = Environmental Protection Agency; HEPA = High Efficiency Particulate Air filters; IARC = International Agency for Research on Cancer; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RCRA = Resource Conservation and Recovery Act; SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit; TDG = Transport Dangerous Goods TSCA = Toxic Substance Control Act; TWA = Time Weighted Average; WHMIS = Workplace Hazardous Materials Information System.

End of Sheet VEL-034