Material Name: DECON-Clean® Sterile

ID: DC-01-98

DECON-Clean[®] Sterile Pharmaceutical Clean Room Formula Residues Remover

MATERIAL SAFETY DATA SHEET – USA Version

COMPLIES WITH OSHA HAZARD COMMUNICATIONS STANDARD 29 CFR 1910.1200 (Complies with Commission Directive 91/155/EEC amended by 2001/58/EC)



Veltek Associates, Inc. 15 Lee Boulevard • Malvern, PA 19355-1234 • USA T: 610-644-8335 f: 610-644-8336 www.steirle.com

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Page 1 of 8

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

Product Use: Cleaner, Residue Remover Manufacturer Information Veltek Associates, Inc. 15 Lee Blvd.

Malvern, PA USA 19355-1234

Phone: 610-644-8335 Fax: 610-644-8336 Emergency # 24 Hr CHEMTREC U.S. (800) 424-9300 24 Hr CHEMTREC International (703) 527-3887

*** Section 2 - Hazards Identification ***

Emergency Overview

WARNING - Causes severe irritation to the eyes, skin, gastrointestinal tract, and respiratory system. This product may be harmful by inhalation and if it is swallowed. Overexposure may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Chronic exposure may lead to damage of the liver, kidneys, and the blood and blood-forming organs. Contains a component that may be absorbed through the skin.

Potential Health Effects: Eyes

This product is severely irritating to the eyes. Symptoms include itching, burning, redness and tearing.

Potential Health Effects: Skin

This product is severely irritating to the skin. Product contains components which may be absorbed through the skin.

Potential Health Effects: Ingestion

This product may be harmful if it is swallowed. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Product can cause irritation to the gastrointestinal tract.

Potential Health Effects: Inhalation

This product may be harmful by inhalation. This product is irritating to the respiratory system and mucous membranes. Excessive inhalation of this product may cause headache, dizziness, blurred vision, nausea and vomiting.

HMIS Ratings: Health: 2 Fire: 1 Physical Hazard: 0 Pers. Prot.: Goggles and Gloves

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

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

CAS #	Component	Percent
7732-18-5	Water	80
111-76-2	2-Butoxyethanol	10
7722-88-5	Tetrasodium pyrophosphate	5
1310-58-3	Potassium hydroxide	2.5
61790-44-1	Potassium soap	2.5

Component Information/Information on Non-Hazardous Components

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

This product is considered a controlled product under the Canadian Controlled Products Act.

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

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

First Aid: Skin

For skin contact, wash immediately with soap and water. Immediately take off all contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, seek medical attention.

Material Name: DECON-Clean® Sterile

First Aid: Ingestion

Do not induce vomiting. Call a physician immediately.

First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen if qualified personnel are available. Seek medical attention.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties. Product is a negligible fire hazard.

Product is a negligible life ha

Hazardous Combustion Products

Oxides of carbon, potassium, sodium and phosphorous.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 2 Fire: 1 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. Contain the discharged material. Block any potential routes to water systems.

Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into appropriate container for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Do not get this material in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product.

** Section 7 - Handling and Storage ***

Handling Procedures

Do not get this material in your eyes, on your skin, or on your clothing. Do not inhale vapors or mists of this product. Keep container closed. Wash thoroughly after handling.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place. Do not store in sunlight. Do not store above 120°F (49°C). Do not freeze.

ID: DC-01-98

omponent Exposure	Section 8 - Exposure Controls / Personal Protection * * *
2-Butoxyethanol	
ACGIH:	20 ppm TWA
OSHA:	25 ppm TWA; 120 mg/m3 TWA
USHA.	Prevent or reduce skin absorption
NIOSH:	
NIOSH.	5 ppm TWA; 24 mg/m3 TWA Potential for dermal absorption
Alberta:	20 ppm TWA; 97 mg/m3 TWA
Alberta.	
British Columbia:	Substance may be readily absorbed through intact skin 20 ppm TWA
Manitoba:	25 ppm TWA; 120 mg/m3 TWA
Marittoba.	skin - potential for cutaneous absorption
New Brunswick:	25 ppm TWA; 121 mg/m3 TWA
New Drunswick.	Skin - potential for cutaneous absorption
NW Territories:	25 ppm TWA; 120 mg/m3 TWA
NW Terniones.	75 ppm STEL; 360 mg/m3 STEL
	Skin notation
Nova Scotia:	20 ppm TWA
Nunavut:	25 ppm TWA; 120 mg/m3 TWA
Nullavat.	75 ppm STEL; 360 mg/m3 STEL
	Skin notation
Ontario:	20 ppm TWAEV
Ontario.	Absorption through skin, eyes, or mucous membranes
Quebec:	25 ppm TWAEV; 121 mg/m3 TWAEV
Quoboo.	Skin designation
Saskatchewan:	120 mg/m3 TWA; 25 ppm TWA
Casitatoriewari.	150 mg/m3 STEL; 30 ppm STEL
Yukon:	50 ppm TWA; 240 mg/m3 TWA
	150 ppm STEL; 720 mg/m3 STEL
	Skin notation
Tetrasodium pyr	ophosphate (7722-88-5)
ACGIH:	5 mg/m3 TWA
OSHA:	5 mg/m3 TWA
NIOSH:	5 mg/m3 TWA
Alberta:	5 mg/m3 TWA
British Columbia:	5 mg/m3 TWA
Manitoba:	5 mg/m3 TWA
New Brunswick:	5 mg/m3 TWA
NW Territories:	5 mg/m3 TWA
	10 mg/m3 STEL
Nova Scotia:	5 mg/m3 TWA
Nunavut:	5 mg/m3 TWA
_	10 mg/m3 STEL
Ontario:	5 mg/m3 TWAEV
Quebec:	5 mg/m3 TWAEV
Saskatchewan:	5 mg/m3 TWA 10 mg/m3 STEL

Material Name: DECON-Clean® Sterile

Potassium hydroxide (1310-58-3)

2 mg/m3 Ceiling
2 mg/m3 Ceiling
2 mg/m3 CEV
2 mg/m3 Ceiling
2 mg/m3 Ceiling
2 mg/m3 Ceiling

Engineering Controls

Use local exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

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

Personal Protective Equipment: Skin

Use impervious gloves and apron.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively prevent buildup of vapors, appropriate NIOSH/MSHA respiratory protection must be provided

Personal Protective Equipment: General

Eyewash fountains and emergency showers are required. Wash hands after handling product.

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

Appearance: Physical State:			Characteristic 9.5-11.0
Vapor Pressure:	20 mmHg@ 68°F (20°C)	Vapor Density:	>1
Boiling Point:	210°F (99°C)	Melting Point:	Not Available
Solubility (H2O):	Complete	Specific Gravity:	1.01
Evaporation Rate:		Octanol/H2O Coeff.:	Not Available
Upper Flammability Limit (UFL):	Not available	Lower Flammability Limit (LFL):	Not available
Flash Point Method:	Not available	Flash Point:	Not available
Auto Ignition:	Not Available		

*** 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

Product may react with strong oxidizing materials, bases and metals.

Hazardous Decomposition

Oxides of carbon, potassium, sodium and phosphorous.

Possibility of Hazardous Reactions

Will not occur.

* * * * * * **Section 11 - Toxicological Information**

Acute Dose Effects

A: General Product Information

Causes severe irritation to the eyes, skin, gastrointestinal tract, and respiratory system. This product may be harmful by inhalation and if it is swallowed. Overexposure can result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Chronic exposure can lead to damage of the liver, kidneys, and the blood and blood-forming organs. Contains a component that can be absorbed through the skin.

Product Information provided by Supplier: Oral LD50 Rat: 5840 mg/kg Dermal LD50 Rabbit: 1300 mg/kg Inhalation LC50 Rat: 1200 mg/kg

B: Component Analysis - LD50/LC50

2-Butoxyethanol (111-76-2) Inhalation LC50 Rat: 2.21 mg/L/4H; Inhalation LC50 Rat: 450 ppm/4H; Oral LD50 Rat: 470 mg/kg; Dermal LD50

Rat: 2270 mg/kg; Dermal LD50 Rabbit: 220 mg/kg

Tetrasodium pyrophosphate (7722-88-5)

Oral LD50 Rat: 4 g/kg

Potassium hydroxide (1310-58-3)

Oral LD50 Rat: 214 mg/kg

Carcinogenicity

A: General Product Information

No carcinogenicity data available for this product.

B: Component Carcinogenicity

2-Butoxyethanol (111-76-2)

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans IARC: Monograph 88, 2004 (Group 3 (not classifiable))

Target Organ Effects

Skin, eyes, respiratory system, central nervous system.

* * * Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

2-Butoxyethanol (111-76-2)

Test & Species		Conditions
96 Hr LC50 bluegill 24 Hr LC50 goldfish	1490 mg/L	static
24 Hr LC50 water flea	1650 mg/L 1720 mg/L	
	1720 mg/L	
Potassium hydroxide (1310	-58-3)	
Test & Species		Conditions

24 Hr LC50 mosquito fish 80.0 mg/L

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not regulated as a hazardous material.

TDG Information

Shipping Name: Not regulated as a dangerous good.

IATA/ICAO Information

Shipping Name: Not regulated as a dangerous good.

IMDG Information

Shipping Name: Not regulated as a dangerous good.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4). **Potassium hydroxide (1310-58-3)**

CERCLA: 1000 lb final RQ; 454 kg final RQ

Acute Health: Yes Chronic Health: Yes 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

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
2-Butoxyethanol	111-76-2	Yes	Yes	Yes	Yes	Yes	Yes
Tetrasodium pyrophosphate	7722-88-5	Yes	Yes	Yes	Yes	Yes	Yes
Potassium hydroxide	1310-58-3	Yes	Yes	Yes	Yes	Yes	Yes

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.

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
2-Butoxyethanol	111-76-2	1 % (English Item 721, French Item 824)
Tetrasodium pyrophosphate	7722-88-5	1 % (English Item 1536, French Item 1462)
Potassium hydroxide	1310-58-3	1 % (English Item 1335, French Item 996)

WHMIS Classification: Class D2B, Toxic Material Additional Regulatory Information

A: General Product Information

No additional information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Water	7732-18-5	Yes	DSL	EINECS
2-Butoxyethanol	111-76-2	Yes	DSL	EINECS
Tetrasodium pyrophosphate	7722-88-5	Yes	DSL	EINECS
Potassium hydroxide	1310-58-3	Yes	DSL	EINECS
Potassium soap	61790-44-1	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Other Information

No additional information available.

MSDS History

New MSDS- 13 July 2005

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; 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.

This is the end of MSDS # DC-01-98