

# Retaliate

## Neutral Disinfectant Cleaner

# Product Information

- EPA Registered - Cleaner Disinfectant
- Virucide, Bactericide, Fungicide & Mildewcide



## Disinfectant/Cleaner/Sanitizer

### Desinfectante / Limpiador / Sanitizante

#### DESCRIPTION:

A multi-purpose, neutral pH, germicidal detergent and deodorant effective in hard water up to 200 ppm (calculated as CaCO<sub>3</sub>) in the presence of a moderate amount of soil (5% organic serum) according to the AOAC Use-dilution Test. Disinfects, cleans, and deodorizes in one labor saving step. For use in hospitals and nursing homes as a disinfectant. Use in schools, colleges, veterinary clinics, animal life science laboratories, pet shops, airports, and kennels.

Disinfects, cleans and deodorizes the following hard, nonporous inanimate surfaces: floors, walls, (non-medical) metal surfaces, (non-medical) stainless steel surfaces, glazed porcelain, plastic surfaces (such as polypropylene, polystyrene, acrylic, etc.). This product kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). Effective against Influenza A virus associated with the flu.

#### DIRECTIONS:

Dilute product 1:256 or 1/2 ounces per gallon of water (660 ppm quat). Use a mop, brush, sponge or coarse sprayer. Apply to surface and let stand for a few minutes. Rinse with clean water.

### Efficacy - see efficacy sheet for additional claims

Bacteria	Contact Time	Viruses	Contact Time
Pseudomonas aeruginosa <sup>1</sup>	10 min	Human coronavirus	1 min
Staphylococcus aureus <sup>1</sup>	10 min	Influenza A Virus/Hong Kong	2 min
Salmonella enterica	10 min	HIV-1 (AIDS virus)	4 min
Acinetobacter baumannii	10 min	Adenovirus Type 7- at 8 oz per gallon	10 min
Acinetobacter calcoaceticus	10 min	Hepatitis B Virus (HBV)	10 min
Bordetella bronchiseptica	10 min	Hepatitis C Virus (HCV)	10 min
Chlamydia psittaci	10 min	Herpes Simplex Virus Type 1	10 min
Staphylococcus aureus - Community	10 min	Herpes Simplex Virus Type 2	10 min
Associated Methicillin - Resistant - CA-MRSA (NRS384) (USA300)	10 min	Rotavirus (VA)	10 min
Staphylococcus aureus - Community	10 min	Respiratory Syncytial Virus (RSV)	10 min
Associated Methicillin - Resistant - CA-MRSA (NRS123) (USA400)	10 min	Rubella Virus	10 min
Enterobacter aerogenes	10 min	SARS Associated Coronavirus (SARS)	10 min
Enterobacter cloacae	10 min	SARS related Coronavirus2 cause of COVID-19	4 min
Enterococcus faecalis	10 min	Vaccinia virus	10 min
-Vancomycin Resistant (VRE)	10 min		
Escherichia coli <sup>1</sup>	10 min		
Fusobacterium necrophorum	10 min		
Klebsiella pneumoniae <sup>1</sup>	10 min		
Legionella pneumophila	10 min		
Listeria monocytogenes	10 min		
Pasteurella multocida	10 min		
Proteus mirabilis	10 min		
Proteus vulgaris	10 min		
Salmonella enteritidis	10 min		
Salmonella typhi	10 min		
Serratia marcescens	10 min		
Shigella flexneri	10 min		
Shigella sonnei	10 min		
Staphylococcus aureus	10 min		
-Methicillin resistant (MRSA)	10 min		
Staphylococcus aureus	10 min		
-Vancomycin Intermediate Resistant (VISA)	10 min		
Staphylococcus epidermidis <sup>2</sup>	10 min		
Streptococcus faecalis <sup>1</sup>	10 min		
Streptococcus pyogenes (Strep)	10 min		



1/2 Gallon 146264T4  
1 Gallon 146204

#### TECHNICAL SPECS:

pH 7.5 - 8.5  
Fragrance Lemon  
Color Green  
Specific Gravity 1.03  
VOC Content <4 g/l  
Foam Characteristic Moderate  
Solubility in Water Complete

See SDS for complete product information.

## 1 Material and Supplier Identification

Product Name: **16 Retaliate**

Description: Concentrated Disinfectant/Cleaner/Sanitizer

Recommended use of the chemical and restrictions: Use only for the purpose on product label. This product is not intended to be used without prior dilution if specified on product label.

Supplier's Information: **Maintex, Inc.**  
 13300 E. Nelson Ave  
 City of Industry, CA 91746  
 800-446-1888 (Customer Service)

Emergency Telephone: (800) 255-3924 USA (813)248-0585 International (Chemtel 24 hrs)

## 2 Hazards Identification

Classification of Mixture: Serious Eye Irritation: Category 2A  
 Skin Irritation: Category 2  
 Acute Toxicity Oral: Category 4  
 Acute Toxicity Skin: Category 4

Pictogram

Signal Word: **WARNING**

Hazard Statements: Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation

### Precautionary Statements

General: KEEP OUT OF REACH OF CHILDREN. Read label before use.

Prevention: Do not eat, drink or smoke when using this product., Wash hands thoroughly after handling. Wear protective gloves.

Response: IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin with water. If skin irritation persists: Get medical attention.  
 IF IN EYES: Rinse cautiously with water for several minutes.Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. If problem persists, call a Poison Center or get medical attention.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

## 3 Composition/Information on Ingredients

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>Concentration Range %</u>
Didecyl dimethyl ammonium chloride	7173-51-5	10.14
Alkyl dimethyl benzyl ammonium chloride	68424-85-1	6.76
Ethyl Alcohol	64-17-5	1-2

## 4 First Aid Measures

Eye Contact:	Flush eyes with water for 15 minutes. Remove contact lenses if any.
Skin Contact:	Contact with concentrate may be an irritant to sensitive skin. If spilt in large areas of skin, rinse immediately with water and remove clothing. Wash skin thoroughly with soap and water.
Inhalation	If discomfort is experienced after prolonged exposure to vapors, move person to fresh air. Get medical attention if irritation persists.
Ingestion:	Get medical attention immediately. Rinse mouth with water. Do NOT induce vomiting. Drink glass of water to dilute product.

## 5 Firefighting Measures

Suitable Extinguishing Media:	Water spray, normal foam, dry agent (carbon dioxide, dry chemical powder.)
Specific Hazards arising from the Chemical:	In a fire or if heated, a pressure increase will occur and the container may burst. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide, and carbon dioxide.
Specific Protective Equipment and Precautions for Firefighters:	Firefighters should wear NIOSH approved self-contained breathing apparatus and protective clothing. If safe to do so, remove containers from path of fire. If involved in a fire, keep containers cool with water spray.

## 6 Accidental Release Measures

Emergency Procedures:	Keep area clear of personnel until area has been properly cleaned.
Personal Precautions/ Protective Equipment:	Slippery when spilt. To avoid accidents, clean up immediately and shut off source of leak, if safe to do so. Wear appropriate protective equipment to prevent any contamination of skin, eyes, and personal clothing. Provide sufficient ventilation.
Environmental Precautions:	If contamination of sewers or waterways has occurred, advise local emergency services.
Methods for Containment and Cleaning Up:	Contain spill with absorbent (soil, sand, or other inert material) or spill kit to prevent contamination of sewers or waterways. Neutralization agent is not recommended within building, as toxic vapors may be omitted. Properly dispose of used absorbents in accordance with local, state, and federal regulations.

## 7 Handling and Storage

Precautions for Safe Handling:	Avoid skin and eye contact, inhalation and ingestion. Wash hands thoroughly after use. Keep out of reach of children.
Conditions for Safe Storage, Including Incompatibilities:	Store in cool, dry place and out of direct sunlight. Store away from source of heat or ignition. Do not mix with other chemicals. Keep container closed when not in use, and check regularly for leaks.  See Section 10 for incompatible materials.

## 8 Exposure Controls/Personal Protection

### Control Parameters:

#### Hazardous Ingredients

	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
Didecyl dimethyl ammonium chloride	N/A	N/A	N/A
Alkyl dimethyl benzyl ammonium chloride	N/A	N/A	N/A
Ethyl Alcohol	TWA 1000 ppm	TWA 1000 ppm	N/A

Appropriate engineering controls:

Good ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal Protection

Eye Protection: Use protective glasses or safety goggles if splashing or spray-back is likely.

Hand Protection: Use protective gloves when used for prolong periods or if skin sensitive.

Skin Protection: Use apron if splashing or spray-back is likely.

Respiratory Protection: Use in well ventilated areas or local exhaust ventilation when cleaning small spaces.

Hygiene Measures: Always wash hands after handling chemical products, and before smoking, eating, drinking, or using the toilet. Wash contaminated clothing or protective equipment before storage and re-use.

## 9 Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.03	Vapour Pressure (mm Hg):	< 17 mm Hg
Color:	Green	Evaporation Rate:	< 1	Vapour Density:	> 1
Odor:	Lemon	Solubility in Water:	Complete	Freezing Point (°F):	< 32
pH:	7.2-8.2	VOC (g/L):	<4	Boiling Point (°F):	> 212
				Flash Point (°F):	> 200

< means less than

> means greater than

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## 10 Stability and Reactivity

Reactivity: No specific data

Chemical Stability: Stable

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid exposure to heat and light.

Incompatible Materials: Slightly reactive or incompatible with oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological Information

### Symptoms:

Eye Contact:	Adverse symptoms may include the following: irritation, watering, redness
Skin Contact:	Adverse symptoms may include the following: irritation, redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing
Ingestion:	Adverse symptoms may include the following: stomach pains

### Acute Toxicity:

Eye Contact:	May cause eye irritation.
Skin Contact:	May cause skin irritation.
Inhalation:	May cause respiratory irritation.
Ingestion:	May cause burns to mouth, throat and stomach.

### Toxicity Data:

<b>Hazardous Ingredients</b>	<b>Result</b>	<b>Species</b>	<b>Dose</b>
Didecyl dimethyl ammonium chloride	LD50 - Oral	Rat	238 mg/kg
	LD50 - Dermal	Rabbit	3,342 mg/kg
Alkyl dimethyl benzyl ammonium chloride	LD50	Rat	344 mg/kg
	LD 50- Dermal	Rabbit	3,340 mg/kg
Ethyl Alcohol			

Chronic Effects: No known significant effects or critical hazards

## 12 Ecological Information

Ecotoxicity: No data available.

### Aquatic Toxicity:

<b>Hazardous Ingredients</b>	<b>Result</b>	<b>Species</b>	<b>Dose</b>
Didecyl dimethyl ammonium chloride	No Data Available		
Alkyl dimethyl benzyl ammonium chloride	EC50	Daphnia Magna	<1.00 mg/l/48hrs
Ethyl Alcohol	No data available		

Other Adverse Effects: No known significant effects or critical hazards.

## 13 Disposal Considerations

Disposal Methods: Diluted product can be flushed to sanitary sewer. Discard empty container in trash. Dispose of waste in accordance with federal, state, and local regulations.

## 14 Transportation Information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

### Ground Transport

DOT Classification:	Regulated
UN Number:	1903
Transport Hazard Class:	8
Packaging Group:	III
Hazardous Division:	Disinfectant Liquid, corrosive, n.o.s.
Hazardous Contents:	Alkyldimethylbenzyl ammonium chloride, Ethanol solution

## 15 Regulatory Information

SARA Title III:	No
California Proposition 65:	No
Other Regulations:	EPA Regulated

## 16 Other Information

HMIS/NFPA Hazard Rating:            Health: 2            Flammability: 1            Reactivity: 0

The information contained herein is based on the data available to us. It is believed to be correct. NO warranty, expressed or implied, is made regarding the accuracy of this data or the results to be obtained from the use thereof. For further information consult Maintex, Inc. .

**SDS Revision Date: 7/8/2015**

# Citra-Cide

## Neutral Disinfectant Cleaner

## Product Information

- EPA Registered - Cleaner Disinfectant
- Virucide, Bactericide, Fungicide & Mildewcide



## Disinfectant/Cleaner/Sanitizer

### Desinfectante / Limpiador / Sanitizante

#### DESCRIPTION:

A multi-purpose, neutral pH, germicidal detergent and deodorant effective in hard water up to 200 ppm (calculated as CaCO<sub>3</sub>) in the presence of a moderate amount of soil (5% organic serum) according to the AOAC Use-dilution Test. Disinfects, cleans, and deodorizes in one labor saving step. For use in hospitals and nursing homes as a disinfectant. Use in schools, colleges, veterinary clinics, animal life science laboratories, pet shops, airports, and kennels. Disinfects, cleans and deodorizes the following hard, nonporous inanimate surfaces: floors, walls, (non-medical) metal surfaces, (non-medical) stainless steel surfaces, glazed porcelain, plastic surfaces (such as polypropylene, polystyrene, acrylic, etc.). This product kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu). Effective against Influenza A virus associated with the flu.

#### DIRECTIONS:

Dilute product 1:64 or 2 ounces per gallon of water (660 ppm quat). Use a mop, brush, sponge or coarse sprayer. Apply to surface and let stand for a few minutes. Rinse with clean water.

#### Efficacy - see efficacy sheet for additional claims

Bacteria	Contact Time	Viruses	Contact Time
Pseudomonas aeruginosa <sup>1</sup>	10 min	Human coronavirus	1 min
Staphylococcus aureus <sup>1</sup>	10 min	Influenza A Virus/Hong Kong	2 min
Salmonella enterica	10 min	HIV-1 (AIDS virus)	4 min
Acinetobacter baumannii	10 min	Adenovirus Type 7 - at 8 oz per gallon	10 min
Acinetobacter calcoaceticus	10 min	Hepatitis B Virus (HBV)	10 min
Bordetella bronchiseptica	10 min	Hepatitis C Virus (HCV)	10 min
Chlamydia psittaci	10 min	Herpes Simplex Virus Type 1	10 min
Staphylococcus aureus - Community	10 min	Herpes Simplex Virus Type 2	10 min
Associated Methicillin - Resistant - CA-MRSA (NRS384) (USA300)	10 min	Rotavirus (VA)	10 min
Staphylococcus aureus - Community	10 min	Respiratory Syncytial Virus (RSV)	10 min
Associated Methicillin - Resistant - CA-MRSA (NRS123) (USA400)	10 min	Rubella Virus	10 min
Enterobacter aerogenes	10 min	SARS Associated Coronavirus (SARS)	10 min
Enterobacter cloacae	10 min	SARS related Coronavirus2 cause of COVID-19	4 min
Enterococcus faecalis	10 min	Vaccinia virus	10 min
-Vancomycin Resistant (VRE)	10 min		
Escherichia coli <sup>1</sup>	10 min		
Fusobacterium necrophorum	10 min		
Klebsiella pneumoniae <sup>1</sup>	10 min		
Legionella pneumophila	10 min		
Listeria monocytogenes	10 min		
Pasteurella multocida	10 min		
Proteus mirabilis	10 min		
Proteus vulgaris	10 min		
Salmonella enteritidis	10 min		
Salmonella typhi	10 min		
Serratia marcescens	10 min		
Shigella flexneri	10 min		
Shigella sonnei	10 min		
Staphylococcus aureus	10 min		
-Methicillin resistant (MRSA)	10 min		
Staphylococcus aureus	10 min		
-Vancomycin Intermediate Resistant (VISA)	10 min		
Staphylococcus epidermidis <sup>2</sup>	10 min		
Streptococcus faecalis <sup>1</sup>	10 min		
Streptococcus pyogenes (Strep)	10 min		



1/2 Gallon	145464T4
1 Gallon	145404
5 Gallons	145405
55 Gallons	145455

#### TECHNICAL SPECS:

pH	7.5 - 8.5
Fragrance	Lemon
Color	Yellow
Specific Gravity	1.0
VOC Content	<6 g/l
Foam Characteristic	Med
Solubility in Water	Complete
See SDS for complete product information.	

## 1 Material and Supplier Identification

Product Name: **Citra-Cide**  
 Description: Disinfectant/Cleaner/Sanitizer  
 Recommended use of the chemical and restrictions: Use only for the purpose on product label. This product is not intended to be used without prior dilution if specified on product label.  
 Supplier's Information: **Maintex, Inc.**  
 13300 E. Nelson Ave  
 City of Industry, CA 91746  
 800-446-1888 (Customer Service)  
 Emergency Telephone: (800) 255-3924 USA (813)248-0585 International (Chemtel 24 hrs)

## 2 Hazards Identification

Classification of Mixture: Serious Eye Damage: Category 1  
 Skin Corrosion: Category 1

Pictogram



Signal Word: DANGER  
 Hazard Statements: Causes severe skin burns and eye damage.

### Precautionary Statements

General: KEEP OUT OF REACH OF CHILDREN. Read label before use.  
 Prevention: Do not breathe vapors. Wash hands thoroughly after handling. Wear protective gloves and eye protection.  
 Response: IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin with water. If skin irritation persists: Get medical attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. If problem persists, call a Poison Center or get medical attention.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

## 3 Composition/Information on Ingredients

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>Concentration Range %</u>
Didecyl dimethyl ammonium chloride	7173-51-5	2.54
Alkyl dimethyl benzyl ammonium chloride	68424-85-1	1.69



## 4 First Aid Measures

Eye Contact:	Flush eyes with water for 15 minutes. Remove contact lenses if any.
Skin Contact:	Contact with concentrate may be an irritant to sensitive skin. If spilt in large areas of skin, rinse immediately with water and remove clothing. Wash skin thoroughly with soap and water.
Inhalation	If discomfort is experienced after prolonged exposure to vapors, move person to fresh air. Get medical attention if irritation persists.
Ingestion:	Get medical attention immediately. Rinse mouth with water. Do NOT induce vomiting. Drink glass of water to dilute product.

## 5 Firefighting Measures

Suitable Extinguishing Media:	Water spray, normal foam, dry agent (carbon dioxide, dry chemical powder.)
Specific Hazards arising from the Chemical:	In a fire or if heated, a pressure increase will occur and the container may burst. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide, and carbon dioxide.
Specific Protective Equipment and Precautions for Firefighters:	Firefighters should wear NIOSH approved self-contained breathing apparatus and protective clothing. If safe to do so, remove containers from path of fire. If involved in a fire, keep containers cool with water spray.

## 6 Accidental Release Measures

Emergency Procedures:	Keep area clear of personnel until area has been properly cleaned.
Personal Precautions/ Protective Equipment:	Slippery when spilt. To avoid accidents, clean up immediately and shut off source of leak, if safe to do so. Wear appropriate protective equipment to prevent any contamination of skin, eyes, and personal clothing. Provide sufficient ventilation.
Environmental Precautions:	If contamination of sewers or waterways has occurred, advise local emergency services.
Methods for Containment and Cleaning Up:	Contain spill with absorbent (soil, sand, or other inert material) or spill kit to prevent contamination of sewers or waterways. Neutralization agent is not recommended within building, as toxic vapors may be omitted. Properly dispose of used absorbents in accordance with local, state, and federal regulations.

## 7 Handling and Storage

Precautions for Safe Handling:	Avoid skin and eye contact, inhalation and ingestion. Wash hands thoroughly after use. Keep out of reach of children.
Conditions for Safe Storage, Including Incompatibilities:	Store in cool, dry place and out of direct sunlight. Store away from source of heat or ignition. Do not mix with other chemicals. Keep container closed when not in use, and check regularly for leaks.

See Section 10 for incompatible materials.

## 8 Exposure Controls/Personal Protection

### Control Parameters:

#### Hazardous Ingredients

	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>NIOSH IDLH</u>
Didecyl dimethyl ammonium chloride	N/A	N/A	N/A
Alkyl dimethyl benzyl ammonium chloride	N/A	N/A	N/A

Appropriate engineering controls:

Good ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal Protection

Eye Protection: Use protective glasses or safety goggles if splashing or spray-back is likely.

Hand Protection: Use protective gloves when used for prolonged periods or if skin sensitive.

Skin Protection: Use apron if splashing or spray-back is likely.

Respiratory Protection: Use in well ventilated areas or local exhaust ventilation when cleaning small spaces.

Hygiene Measures: Always wash hands after handling chemical products, and before smoking, eating, drinking, or using the toilet. Wash contaminated clothing or protective equipment before storage and re-use.

## 9 Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.0	Vapour Pressure (mm Hg):	< 17 mm Hg
Color:	Yellow	Evaporation Rate:	< 1	Vapour Density:	> 1
Odor:	Lemon	Solubility in Water:	Complete	Freezing Point (°F):	< 32
pH:	7.5-8.5	VOC (g/L):	<6	Boiling Point (°F):	> 212
				Flash Point (°F):	> 200

< means less than

> means greater than

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## 10 Stability and Reactivity

Reactivity: No specific data

Chemical Stability: Stable

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid exposure to heat and light.

Incompatible Materials: Slightly reactive or incompatible with oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological Information

### Symptoms:

Eye Contact:	Adverse symptoms may include the following: irritation, watering, redness
Skin Contact:	Adverse symptoms may include the following: irritation, redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing
Ingestion:	Adverse symptoms may include the following: stomach pains

### Acute Toxicity:

Eye Contact:	May cause eye irritation.
Skin Contact:	May cause skin irritation.
Inhalation:	May cause respiratory irritation.
Ingestion:	May cause burns to mouth, throat and stomach.

### Toxicity Data:

<u>Hazardous Ingredients</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Didecyl dimethyl ammonium chloride	LD50 - Oral	Rat	238 mg/kg
	LD50 - Dermal	Rabbit	3,342 mg/kg
Alkyl dimethyl benzyl ammonium chloride	LD50	Rat	344 mg/kg
	LD 50- Dermal	Rabbit	3,340 mg/kg

Chronic Effects: No known significant effects or critical hazards

## 12 Ecological Information

Ecotoxicity: No data available.

### Aquatic Toxicity:

<u>Hazardous Ingredients</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Didecyl dimethyl ammonium chloride	No Data Available		
Alkyl dimethyl benzyl ammonium chloride	EC50	Daphnia Magna	<1.00 mg/l/48hrs

Other Adverse Effects: No known significant effects or critical hazards.

## 13 Disposal Considerations

Disposal Methods: Diluted product can be flushed to sanitary sewer. Discard empty container in trash. Dispose of waste in accordance with federal, state, and local regulations.

## 14 Transportation Information

Certain shipping modes or package sizes may have exceptions from the transport regulations.

The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

### Ground Transport

DOT Classification: Not Regulated

UN Number:

Transport Hazard Class:

Packaging Group: N/A

Hazardous Division:

Hazardous Contents:

## 15 Regulatory Information

SARA Title III: No

California Proposition 65: No

Other Regulations: EPA Regulated

## 16 Other Information

HMIS/NFPA Hazard Rating:

Health: 1

Flammability: 0

Reactivity: 0

The information contained herein is based on the data available to us. It is believed to be correct. NO warranty, expressed or implied, is made regarding the accuracy of this data or the results to be obtained from the use thereof. For further information consult Maintex, Inc. .

**SDS Revision Date: 7/8/2015**

- EPA Registered - Cleaner Disinfectant
- Hospital Grade Disinfectant
- Neutralizes Odors

### Ready-To-Use Disinfectant Detergente Desinfectante

Ready-to-use, all purpose disinfectant cleaner and deodorizer. Quaternary formula kills TB, HIV-1, Hepatitis B, MRSA. MRSA-CA, VRE and Norovirus. Meets OSHA bloodborne pathogen cleanup standard. Disinfectant, mildewstat, virucide and fungicide. Recommended for use in hospitals, nursing homes, schools, universities, hotels, detention facilities and industrial facilities.

**DIRECTIONS:**

Spray area until it is covered with solution. Allow product to penetrate surface and remain wet. No scrubbing is necessary. Wipe off with a clean cloth, mop or sponge. The product will not leave grit or soap scum.



**Efficacy - see efficacy sheet for additional claims**

**Bacteria Contact Time**

Staphylococcus aureus	3 min
Salmonella	3 min
Pseudomonas aeruginosa	3 min
Community Associated Methicillin Resistant Staphylococcus aureus (CA-MRSA)	3 min
Corynebacterium amnionigenes	3 min
Enterococcus faecium	3 min
Escherichia coli	3 min
Escherichia coli O157:H7	3 min
Listeria monocytogenes	3 min
Methicillin resistant Staphylococcus aureus (MRSA)	3 min
Methicillin resistant Staphylococcus epidermidis (MRSE)	3 min
Salmonella (typhi) enterica	3 min
Streptococcus pyogenes	3 min
Vancomycin resistant Enterococcus faecalis (VRE)	3 min
Vancomycin intermediate resistant Staphylococcus aureus (VISA)	3 min
Yersinia enterocolitica	3 min

**Viruses Contact Time**

Feline Calicivirus	30 sec
Norovirus	30 sec
Rabies Virus	30 sec
Human Immunodeficiency Virus, strain of HIV-1	1 min
Avian Influenza A Virus	2 min
Avian Influenza Virus, Type A	2 min
Human Coronavirus	2 min
Pandemic 2009 H1N1 Influenza A Virus	2 min
SARS Associated Coronavirus	2 min
Paramyxovirus (Mumps)	3 min
Rhinovirus Type 39	3 min
Rotovirus	3 min
Bovine Viral Diarrhea Virus	5 min
Hepatitis B Virus	5 min
Hepatitis C Virus	5 min
Canine Parvovirus *See Note	10 min
Hepatitis A Virus	10 min
Poliovirus Type 1, strain Brunhilde	10 min

**Fungicide Contact Time**

Trichophyton mentagrophytes	10 min
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1 Quart 146032  
 1 Gallon 146004

**TECHNICAL SPECS:**

**pH** 11.5 - 12.5  
**Fragrance** Lemon  
**Color** Clear  
**Specific Gravity** 1.0  
**Chemical Base** Quaternary  
**Foam Characteristic** Moderate  
**Solubility in Water** Complete  
**Concentration** RTU

See SDS for complete product information.

Note: COVID-19 is caused by SARS-CoV-2, a novel coronavirus. Turbo-Kill kills similar viruses and therefore can be used against SARS-CoV-2 when used in accordance with the directions for use against Canine Parvovirus on hard, non-porous surfaces. Refer to the CDC website at <https://www.cdc.gov/coronavirus/2019-ncov/index.html> for additional information.

## 1 Material and Supplier Identification

Product Name: **Turbo Kill**

Description: Disinfectant/Cleaner/Sanitizer

Recommended use of the chemical and restrictions: Use only for the purpose on product label. This product is not intended to be used without prior dilution if specified on product label.

Supplier's Information: **Maintex, Inc.**  
 13300 E. Nelson Ave  
 City of Industry, CA 91746  
 800-446-1888 (Customer Service)

Emergency Telephone: (800) 255-3924 USA (813)248-0585 International (Chemtel 24 hrs)

## 2 Hazards Identification

Classification of Mixture: Not Classified Pictogram  
No Pictogram

Signal Word: **WARNING**

Hazard Statements: May cause skin and eye irritation.

### Precautionary Statements

General: Keep out of Reach of Children. Read label before use.

Prevention: Wash hands thoroughly after handling.

Response: IF ON SKIN: Take off contaminated clothing and wash before reuse. Rinse skin with water. If skin irritation persists: Get medical attention.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. If problem persists, call a Poison Center or get medical attention.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

## 3 Composition/Information on Ingredients

<u>Hazardous Ingredients</u>	<u>CAS Number</u>	<u>Concentration Range %</u>
Diethylene Glycol Monobutyl Ether	112-34-5	1-10
Alkyl dimethyl ethylbenzyl ammonium chloride	68956-79-6	0.105
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	0.105

## 4 First Aid Measures

Eye Contact:	Flush eyes with water for 15 minutes. Remove contact lenses if any.
Skin Contact:	Contact with concentrate may be an irritant to sensitive skin. If spilt in large areas of skin, rinse immediately with water and remove clothing. Wash skin thoroughly with soap and water.
Inhalation	If discomfort is experienced after prolonged exposure to vapors, move person to fresh air. Get medical attention if irritation persists.
Ingestion:	Get medical attention immediately. Rinse mouth with water. Do NOT induce vomiting. Drink glass of water to dilute product.

## 5 Firefighting Measures

Suitable Extinguishing Media:	Water spray, normal foam, dry agent (carbon dioxide, dry chemical powder.)
Specific Hazards arising from the Chemical:	In a fire or if heated, a pressure increase will occur and the container may burst. Combustion products may include and are not limited to nitrogen oxides, carbon monoxide, and carbon dioxide.
Specific Protective Equipment and Precautions for Firefighters:	Firefighters should wear NIOSH approved self-contained breathing apparatus and protective clothing. If safe to do so, remove containers from path of fire. If involved in a fire, keep containers cool with water spray.

## 6 Accidental Release Measures

Emergency Procedures:	Keep area clear of personnel until area has been properly cleaned.
Personal Precautions/ Protective Equipment:	Slippery when spilt. To avoid accidents, clean up immediately and shut off source of leak, if safe to do so. Wear appropriate protective equipment to prevent any contamination of skin, eyes, and personal clothing. Provide sufficient ventilation.
Environmental Precautions:	If contamination of sewers or waterways has occurred, advise local emergency services.
Methods for Containment and Cleaning Up:	Contain spill with absorbent (soil, sand, or other inert material) or spill kit to prevent contamination of sewers or waterways. Neutralization agent is not recommended within building, as toxic vapors may be omitted. Properly dispose of used absorbents in accordance with local, state, and federal regulations.

## 7 Handling and Storage

Precautions for Safe Handling:	Avoid skin and eye contact, inhalation and ingestion. Wash hands thoroughly after use. Keep out of reach of children.
Conditions for Safe Storage, Including Incompatibilities:	Store in cool, dry place and out of direct sunlight. Store away from source of heat or ignition. Do not mix with other chemicals. Keep container closed when not in use, and check regularly for leaks.  See Section 10 for incompatible materials.

## 8 Exposure Controls/Personal Protection

### Control Parameters:

#### Hazardous Ingredients

Diethylene Glycol Monobutyl Ether

#### ACGIH TLV

TWA 10 ppm

#### OSHA PEL

N/A

#### NIOSH IDLH

N/A

Alkyl dimethyl ethylbenzyl ammonium chloride

N/A

N/A

N/A

Alkyl dimethyl benzyl ammonium chloride

N/A

N/A

N/A

Appropriate engineering controls:

Good ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal Protection

Eye Protection: Use protective glasses or safety goggles if splashing or spray-back is likely.

Hand Protection: Use protective gloves when used for prolong periods or if skin sensitive.

Skin Protection: Use apron if splashing or spray-back is likely.

Respiratory Protection: Use in well ventilated areas or local exhaust ventilation when cleaning small spaces.

Hygiene Measures: Always wash hands after handling chemical products, and before smoking, eating, drinking, or using the toilet. Wash contaminated clothing or protective equipment before storage and re-use.

## 9 Physical and Chemical Properties

Physical State:	Liquid	Specific Gravity:	1.00	Vapour Pressure (mm Hg):	< 17 mm Hg
Color:	Clear	Evaporation Rate:	< 1	Vapour Density:	> 1
Odor:	Lemon	Solubility in Water:	Complete	Freezing Point (°F):	< 32
pH:	11.5-12.5	VOC (g/L):	<1	Boiling Point (°F):	> 212
				Flash Point (°F):	> 200

< means less than

> means greater than

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## 10 Stability and Reactivity

Reactivity: No specific data

Chemical Stability: Stable

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Avoid exposure to heat and light.

Incompatible Materials: Slightly reactive or incompatible with oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.



## 11 Toxicological Information

### Symptoms:

Eye Contact:	Adverse symptoms may include the following: irritation, watering, redness
Skin Contact:	Adverse symptoms may include the following: irritation, redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation, coughing
Ingestion:	Adverse symptoms may include the following: stomach pains

### Acute Toxicity:

Eye Contact:	May cause eye irritation.
Skin Contact:	May cause skin irritation.
Inhalation:	May cause respiratory irritation.
Ingestion:	May cause burns to mouth, throat and stomach.

### Toxicity Data:

#### Hazardous Ingredients

<u>Hazardous Ingredients</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Diethylene Glycol Monobutyl Ether	LC0 - Inhalation	Rat	3 mg/l
	LD 50- Dermal	Rabbit	2764 mg/kg
	LD50 - Oral	Mouse	2410 mg/kg
Alkyl dimethyl ethylbenzyl ammonium chloride			
Alkyl dimethyl benzyl ammonium chloride	no data available		

Chronic Effects: No known significant effects or critical hazards

## 12 Ecological Information

### Ecotoxicity:

#### Aquatic Toxicity:

##### Hazardous Ingredients

<u>Hazardous Ingredients</u>	<u>Result</u>	<u>Species</u>	<u>Dose</u>
Diethylene Glycol Monobutyl Ether	LC50	Lepornis macrochirus	1300 mg/l/96 hrs
	NOEC	Daphnia magna	100 mg/l/48 hrs
	NOEC	Algae	100 mg/l 96 hrs
Alkyl dimethyl ethylbenzyl ammonium chloride			
Alkyl dimethyl benzyl ammonium chloride	No data available		

Other Adverse Effects:

## 13 Disposal Considerations

Disposal Methods: Diluted product can be flushed to sanitary sewer. Discard empty container in trash. Dispose of waste in accordance with federal, state, and local regulations.

## 14 Transportation Information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

#### Ground Transport

DOT Classification: Not Regulated

UN Number:

Transport Hazard Class:

Packaging Group:

Hazardous Division:

Hazardous Contents:

## 15 Regulatory Information

SARA Title III: No

California Proposition 65: No

**16 Other Information**

HMIS/NFPA Hazard Rating:

Health: 1

Flammability: 0

Reactivity: 0

The information contained herein is based on the data available to us. It is believed to be correct. NO warranty, expressed or implied, is made regarding the accuracy of this data or the results to be obtained from the use thereof. For further information consult Maintex, Inc. .

**SDS Revision Date: 7/8/2015**

EPA Registration #	Active Ingredients	Product Name	Company	Get Clean Products	Dilution	Follow the Disinfection & Direction of	Contact Time (surface time)	Formulation type	Emerging Viral Pathogen
47371-129	Quarternary Ammonium	Formulation HWS-256	H&S Chemicals Division of Lonza, LLC	Retaliate	2 oz/gallon	Adenovirus Type 7/ SARS associated Coronavirus	10 Minutes/ 4 min for COVID-19	Dilutable	Y
47371-131	Quarternary Ammonium	Formulation HWS-64	H&S Chemicals Division of Lonza, LLC	Citra-Cide Neutral Disinfectant Cleaner	8 oz/gallon	Adenovirus Type 7/ SARS associated Coronavirus	10 Minutes / 4 min for COVID-19	Dilutable	Y
87742-1-92595	Thymol	Thymox Disinfectant Spray	Laboratorie M2	Bioesque Botanical Disinfectant		Norovirus	4 Minutes	Ready-to-Use	Y
70627-24	Quarternary Ammonium	Virex II 256	Diversey Inc	Virex II 256		Adenovirus Type 2	10 Minutes	Dilutable	Y
1839-83	Quarternary Ammonium	Detergent Disinfectant Pump	Stephen Company	Turbo-Kill	RTU	Adenovirus/ SARS associated Coronavirus	2 Minutes for COVID-19	RTU	Y

List N: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>

**Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2**

This list includes products with emerging viral pathogen claims and those with human coronavirus claims.

If a product with an emerging viral pathogen claim is not available, a product with a coronavirus claim is used.