



## Virex Plus Disinfectant (US)

Version Number: 4

Preparation date: 2015-02-20

### 1. IDENTIFICATION

**Product name:** Virex Plus Disinfectant (US)  
**Product Code:** 100842024, 100842025  
**SDS #:** MS0800377  
**Recommended use:** • This product is intended to be diluted prior to use  
**Uses advised against:** Uses other than those identified are not recommended

**Manufacturer, importer, supplier:**

US Headquarters  
 Diversey, Inc.  
 8310 16th St.  
 Sturtevant, Wisconsin 53177-1964  
 Phone: 1-888-352-2249  
 MSDS Internet Address: [www.diversey.com](http://www.diversey.com)

**Emergency telephone number:** 1-800-851-7145 (U.S.); 1-651-917-6133 (Int'l)

### 2. HAZARDS IDENTIFICATION

**Classification for the undiluted product**

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Flammability	Combustible liquid, Category 4
Metal Corrosion:	Category 1



**Signal Word:**

**Danger.**

**Precautionary Statements**

**COMBUSTIBLE LIQUID. CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. HARMFUL IF SWALLOWED. MAY BE CORROSIVE TO METALS.**

Avoid contact with eyes, skin and clothing. Causes burns/ serious damage to mouth, throat and stomach. Keep away from flames and hot surfaces. No smoking. Keep container tightly closed. Keep only in original container. Do not breathe spray. Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Wear chemical-splash goggles, chemical-resistant gloves and protective footwear. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Center (1-800-851-7145) or physician. Wash contaminated clothing before reuse. In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish. Absorb spillage to prevent material damage. Store in a well-ventilated place. Keep cool. Store in corrosive-resistant container with a resistant inner liner. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: Mix only with water. DO NOT MIX WITH CHLORINE BLEACH, ACIDS, OR ANY OTHER

**Virex Plus Disinfectant (US)**

1 of 6



PRODUCT OR CHEMICAL. Can react to release chlorine gas. May vigorously react with acids resulting in spattering and excessive heat.

**Health hazards not otherwise classified (HHNOC)** - Not applicable

**Physical hazards not otherwise classified (PHNOC)** - Not applicable

**Classification for the diluted product @ 1:64**

This product, when diluted as stated on the label, is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and current Canadian Controlled Products Regulations (CPR).

**Precautionary Statements**

None required.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Classified Ingredients**

Ingredient(s)	CAS #	Weight %
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	5 - 10%
Tetrasodium salt of EDTA	64-02-8	5 - 10%
Octyl decyl dimethyl ammonium chloride	32426-11-2	5 - 10%
Alcohol ethoxylates	68439-46-3	5 - 10%
Didecyl dimethyl ammonium chloride	7173-51-5	3% - < 5%
Ethyl alcohol	64-17-5	1% - < 3%
Dioctyl dimethyl ammonium chloride	5538-94-3	1% - < 3%
Disodium metasilicate pentahydrate	10213-79-3	1% - < 3%

\*Exact percentages are being withheld as trade secret information

### 4. FIRST AID MEASURES

**Undiluted Product:**

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes.

**Skin:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Ingestion:** IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water.

**Most Important Symptoms/Effects:** No information available.

**Immediate medical attention and special treatment needed** Not applicable.

**Aggravated Medical Conditions:** Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.

**Diluted Product:**

**Eyes:** Rinse with plenty of water. If irritation occurs and persists, get medical attention.

**Skin:** Rinse with plenty of water. If irritation occurs and persists, get medical attention.

**Inhalation:** No specific first aid measures are required

**Ingestion:** Rinse mouth with water.

### 5. FIRE-FIGHTING MEASURES

**Specific methods:**

No special methods required

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.

**Specific hazards:**

Corrosive material (See sections 8 and 10). Although this product has a flash point below 200° F, it is an aqueous solution which has been tested and shown not to sustain combustion.

**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Extinguishing media which must not be used for safety reasons:** No information available.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions: Environmental precautions and clean-up methods:

Remove all sources of ignition. Put on appropriate personal protective equipment (see Section 8.).  
Clean-up methods - large spillage. Remove all sources of ignition. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. COMBUSTIBLE LIQUID AND VAPOR. Keep away from open flames, hot surfaces and sources of ignition. Mix only with water. DO NOT MIX WITH CHLORINE BLEACH, ACIDS, OR ANY OTHER PRODUCT OR CHEMICAL. Can react to release chlorine gas. May vigorously react with acids resulting in spattering and excessive heat. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

### Storage:

Store in a cool, dry, well ventilated area away from heat or open flame. Protect from freezing.

**Aerosol Level (if applicable) :** Not applicable

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines:

Ingredient(s)	CAS #	ACGIH	OSHA
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	-	-
Tetrasodium salt of EDTA	64-02-8	-	-
Octyl decyl dimethyl ammonium chloride	32426-11-2	-	-
Alcohol ethoxylates	68439-46-3	-	-
Didecyl dimethyl ammonium chloride	7173-51-5	-	-
Ethyl alcohol	64-17-5	1000 ppm (STEL)	1000 ppm (TWA) 1900 mg/m <sup>3</sup> (TWA)
Diocetyl dimethyl ammonium chloride	5538-94-3	-	-
Disodium metasilicate pentahydrate	10213-79-3	-	-

### Undiluted Product:

#### Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels Respiratory protection is not required if good ventilation is maintained.

### Personal Protective Equipment

#### Eye protection:

Chemical-splash goggles.

#### Hand protection:

Chemical-resistant gloves.

#### Skin and body protection:

Protective footwear. If major exposure is possible, wear suitable protective clothing and footwear.

#### Respiratory protection:

In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

#### Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

### Diluted Product:

### Personal Protective Equipment

#### Eye protection:

No personal protective equipment required under normal use conditions.

#### Hand protection:

No personal protective equipment required under normal use conditions.

#### Skin and body protection:

No personal protective equipment required under normal use conditions.

#### Respiratory protection:

No personal protective equipment required under normal use conditions.

#### Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

**Physical State:** Liquid

**Evaporation Rate:** No information available

**Odor threshold:** No information available.

**Melting point/range:** Not determined

**Autoignition temperature:** No information available

**Solubility in other solvents:** No information available

**Density:** 8.47 lbs/gal 1.015 Kg/L

**Bulk density:** No information available

**Flash point:** 142 °F 61 °C

**Color:** Hazy Blue

**Odor:** Surfactant

**Boiling point/range:** Not determined

**Decomposition temperature:** Not determined

**Solubility:** Completely Soluble

**Relative Density (relative to water):** 1.015

**Vapor density:** No information available

**Vapor pressure:** No information available.

**Partition coefficient (n-octanol/water):** No information available

<b>Dilution Flash Point:</b> 201 °F 93.5 °C	<b>Viscosity:</b> No information available
<b>Elemental Phosphorus:</b> 0.00 % by wt.	<b>VOC:</b> 2.77 % *
<b>pH:</b> 12.75	<b>VOC % by wt. at use dilution</b> 0.04 % *
<b>Dilution pH:</b> 10..02 @ 1:64	<b>Flammability (Solid or Gas):</b> Not applicable
<b>Metal Corrosion:</b> Not determined	
<b>Explosion limits:</b> - upper: Not determined - lower: Not determined	

\* - Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, Consumer Products, Sections 94508

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Not Applicable
<b>Stability:</b>	The product is stable
<b>Possibility of hazardous reactions:</b>	May vigorously react with acids resulting in spattering and excessive heat.
<b>Hazardous decomposition products:</b>	None reasonably foreseeable.
<b>Materials to avoid:</b>	Do not mix with chlorinated products (such as bleach). Oxidizing agents. Strong acids. Anionic surfactant.
<b>Conditions to avoid:</b>	Keep away from open flames, hot surfaces and sources of ignition. Do not mix with any other product or chemical.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Skin contact, Inhalation, Eye contact, Ingestion

### Delayed, immediate, or chronic effects and symptoms from short and long-term exposure

**Skin contact:** Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).

**Eye contact:** Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.

**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.

**Sensitization:** No known effects.

### Carcinogen Listings

Ingredient(s)	CAS #	NTP	IARC	OSHA
Ethyl alcohol	64-17-5		-	

### Numerical measures of toxicity

<b>ATE - Oral (mg/kg):</b>	1900
<b>ATE - Dermal (mg/kg):</b>	>5000
<b>ATE - Inhalatory, mists (mg/l):</b>	18

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available.

**Persistence and Degradability:** No information available.

**Bioaccumulation:** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. This product, as sold, if discarded or disposed, is a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Dispose in compliance with all Federal, state, provincial, and local laws and regulations. This product, when diluted as stated on this SDS, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

**Contaminated Packaging:** Do not re-use empty containers.  
**RCRA Hazard Class (undiluted product):** D002 Corrosive Waste  
**RCRA Hazard Class (diluted product):** Not Regulated

## 14. TRANSPORT INFORMATION

**DOT/TDG/IMDG:** Please refer to the Diversey HazMat Library, only available through Internet Explorer, <http://naextranet.diversey.com/dot/>, for up to date shipping information.

**DOT (Ground) Bill of Lading Description:** LTD. QTY.

**IMDG (Ocean) Bill of Lading Description:** UN1903, DISINFECTANTS, LIQUID, CORROSIVE, N.O.S., (quaternary ammonium compounds), 8, III, LTD. QTY.

## 15. REGULATORY INFORMATION

### International Inventories at CAS# Level

All components of this product are listed on the following inventories: U.S.A. (TSCA).

### U.S. Regulations

**EPA Reg. No. :** 6836-349-70627

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective (rubber or chemical resistant) gloves and protective clothing. Harmful if swallowed or absorbed through the skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

**California Proposition 65:** This product is not subject to the reporting requirements under California's Proposition 65.

### RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	-	-	-	-
Tetrasodium salt of EDTA	64-02-8	-	-	-	-
Octyl decyl dimethyl ammonium chloride	32426-11-2	-	-	-	-
Alcohol ethoxylates	68439-46-3	-	-	-	-
Didecyl dimethyl ammonium chloride	7173-51-5	-	-	-	-
Ethyl alcohol	64-17-5	X	X	X	-
Diocetyl dimethyl ammonium chloride	5538-94-3	-	-	-	-
Disodium metasilicate pentahydrate	10213-79-3	-	-	-	-

### CERCLA/ SARA

#### SARA 311/312 Hazard Categories

**Immediate:** X  
**Delayed:** -  
**Fire:** X  
**Reactivity:** -  
**Sudden Release of Pressure:** -

### Canadian Regulations

**WHMIS hazard class:** Not for sale in Canada.

## 16. OTHER INFORMATION

**NFPA (National Fire Protection Association)**

Rating Scale: (Low Hazard) 0 - 4 (Extreme Hazard)

**Health** 3

**Flammability** 1

**Instability** 0

**Version Number:** 4

**Preparation date:** 2015-02-20

**Reason for revision:** Not applicable

**Prepared by:** NAPRAC

**Additional advice:** • Does not contain an added fragrance

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