



## R2 Plus Hygenic Hard Surface Cleaner

Version Number: 3

Preparation date: 2015-03-03

### 1. IDENTIFICATION

**Product name:** R2 Plus Hygenic Hard Surface Cleaner  
**Product Code:** 5721835  
**SDS #:** MS0800321  
**Recommended use:**

- Disinfectant
- Cleaning product
- 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	Canadian Headquarters Diversey, Inc. - Canada 3755 Laird Road Mississauga, Ontario L5L 0B3 Phone: 1-800-668-3131
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**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 1B
Serious eye damage/eye irritation	Category 1
Flammability	Flammable liquid and vapour, Category 3
Metal Corrosion:	Category 1

**Signal Word:****Danger.**

#### Precautionary Statements

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

Causes burns/ serious damage to mouth, throat and stomach. Avoid contact with eyes, skin and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Keep only in original container. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating or lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. 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.

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Immediately call a Poison Center (1-800-851-7145) or physician. Wash contaminated clothing before reuse. In case of fire: Use CO2, 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 BLEACH OR ANY OTHER PRODUCT OR CHEMICAL. Can react to release chlorine gas.

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

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

**Classification for the diluted product @ 1:256**

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 %
Alcohol ethoxylates	68131-39-5	10 - 20%
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	5 - 10%
Octyl decyl dimethyl ammonium chloride	32426-11-2	5 - 10%
Ethyl alcohol	64-17-5	3% - < 5%
Tetrasodium salt of EDTA	64-02-8	3% - < 5%
Diocetyl dimethyl ammonium chloride	5538-94-3	3% - < 5%
Didecyl dimethyl ammonium chloride	7173-51-5	3% - < 5%
Sodium hydroxide	1310-73-2	> 0.1% - < 1%

\*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.

**Notes to physician:** Probable mucosal damage may contraindicate the use of gastric lavage.

**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:**

Foam, Dry chemical, Carbon dioxide.

**Specific hazards:**

Although this product has a flash point below 200 Deg. F, it is an aqueous solution containing an alcohol and does not 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:**

Put on appropriate personal protective equipment (see Section 8.).

**Environmental precautions and clean-up methods:**

Clean-up methods - large spillage. Use appropriate containment to avoid environmental contamination. 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. Mix only with water. DO NOT MIX WITH BLEACH OR ANY OTHER PRODUCT OR CHEMICAL. Can react to release chlorine gas. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

**Storage:**

Protect from freezing. Store in a cool, dry, well ventilated area away from heat or open flame. KEEP OUT OF REACH OF CHILDREN.

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

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines:**

Ingredient(s)	CAS #	ACGIH	OSHA
Alcohol ethoxylates	68131-39-5	-	-
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	-	-
Octyl decyl dimethyl ammonium chloride	32426-11-2	-	-
Ethyl alcohol	64-17-5	1000 ppm (STEL)	1000 ppm (TWA) 1900 mg/m <sup>3</sup> (TWA)
Tetrasodium salt of EDTA	64-02-8	-	-
Diocetyl dimethyl ammonium chloride	5538-94-3	-	-
Didecyl dimethyl ammonium chloride	7173-51-5	-	-
Sodium hydroxide	1310-73-2	2 mg/m <sup>3</sup> (Ceiling)	2 mg/m <sup>3</sup> (TWA)

**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

**Color:** Clear, Dark, Green

**Evaporation Rate:** No information available

**Odor:** Fresh

**Odor threshold:** No information available.

**Boiling point/range:** Not determined

**Melting point/range:** Not determined

**Decomposition temperature:** Not determined

**Autoignition temperature:** No information available

**Solubility:** Completely Soluble

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

**Density:** 8.51 lbs/gal 1.02 Kg/L

**Bulk density:** No information available

**Flash point:** 130 °F 54.4 °C

**Dilution Flash Point:** >200 °F >93.4 °C

**Elemental Phosphorus:** 0 % by wt.

**pH:** 7.25

**Dilution pH:** 7.0 @ 1:256

**Metal Corrosion:** Not determined

**Explosion limits:** - upper: Not determined - lower: Not determined

**Relative Density (relative to water):** 1.02

**Vapor density:** No information available

**Vapor pressure:** No information available.

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

**Viscosity:** No information available

**VOC:** 4.79 % \*

**VOC % by wt. at use dilution** 0.02 % \*

**Flammability (Solid or Gas):** Not applicable

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

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not Applicable  
**Stability:** The product is stable  
**Hazardous decomposition products:** None known.  
**Materials to avoid:** Anionic surfactant. Oxidizing agents. Do not mix with chlorinated products (such as bleach).  
**Conditions to avoid:** Do not freeze. Keep away from open flames, hot surfaces and sources of ignition.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Eye contact, Skin contact, Inhalation, 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.

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

### Numerical measures of toxicity

**ATE - Oral (mg/kg):** 1900

**ATE - Dermal (mg/kg):** >5000

**ATE - Inhalatory, mists (mg/l):** >20

## 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 not 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):** Not Regulated - Alcohol exclusion  
**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:** UN1903, DISINFECTANTS, LIQUID, CORROSIVE, N.O.S., (quaternary ammonium compounds), 8, III

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

## 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. :** 1839-167-70627

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: KEEP OUT OF REACH OF CHILDREN. CORROSIVE. Causes irreversible eye damage and skin burns. May be fatal if absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles or face shield), clothing, and gloves when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse. PHYSICAL OR CHEMICAL HAZARDS: COMBUSTIBLE. Do not use or store near heat or open flame.

**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	-	-	-	-
Alcohol ethoxylates	68131-39-5	-	-	-	-
n-alkyl dimethyl benzyl ammonium chloride	68424-85-1	-	-	-	-
Octyl decyl dimethyl ammonium chloride	32426-11-2	-	-	-	-
Ethyl alcohol	64-17-5	X	X	X	-
Tetrasodium salt of EDTA	64-02-8	-	-	-	-
Diocetyl dimethyl ammonium chloride	5538-94-3	-	-	-	-
Didecyl dimethyl ammonium chloride	7173-51-5	-	-	-	-
Sodium hydroxide	1310-73-2	X	X	X	X

### CERCLA/ SARA

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Sodium hydroxide	1310-73-2	> 0.1% - < 1%	1000		

### 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** 2

**Instability** 0

**Version Number:** 3

**Preparation date:** 2015-03-03

**Reason for revision:** Not applicable

**Prepared by:** NAPRAC

**Additional advice:** • Contains an added fragrance, see "Odor" heading in section 9 for specific description

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