



R1 Plus Toilet Cleaner

Revision: 2021-02-25

Version: 02.1

1. IDENTIFICATION

Product name: R1 Plus
Toilet Cleaner

SDS #: MS0801297

Recommended use:

- Industrial/Institutional
- Restroom Care
- 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. 1300 Altura Rd., Suite 125 Fort Mill, SC 29708 Phone: 1-888-352-2249 SDS Internet Address: https://sds.diversey.com	Canadian Headquarters Diversey Canada, Inc. 6150 Kennedy Road Unit 3 Mississauga, Ontario L5T 2J4 Phone: 1-800-668-7171
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Emergency telephone number: 1-800-851-7145; 1-651-917-6133 (Int'l)

2. HAZARDS IDENTIFICATION

Classification for the undiluted product

Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Metal Corrosion:	Category 1



Signal word: Danger.

Hazard Statements

CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. MAY BE CORROSIVE TO METALS.

Precautionary Statements

Causes burns/ serious damage to mouth, throat and stomach. Keep container tightly closed. Keep only in original container. Do not breathe vapors. Avoid contact with eyes, skin and clothing. Wash affected areas thoroughly after handling. Wear protective gloves, protective clothing and eye or face protection. 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. Wash contaminated clothing before reuse. 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. Absorb spillage to prevent material damage. Store in corrosive-resistant container with a resistant inner liner. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: DO NOT MIX WITH AMMONIA, BLEACH OR OTHER CHLORINATED COMPOUNDS. Mix only with water. Can react to release hazardous gases. May vigorously react with strong alkaline products resulting in spattering and excessive heat.

Health hazards not otherwise classified (HNNOC) - Not applicable

Physical hazards not otherwise classified (PHNOC) - Not applicable

Classification for the diluted product 1:40

This product, when diluted as stated on the label, is not classified as hazardous according to OSHA 29CFR 1910.1200 (HazCom 2012-GHS) and Canadian Hazardous Products Regulations (HPR) (WHMIS 2015-GHS).

Hazard and Precautionary Statements

None required.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Classified Ingredients

Ingredient(s)	CAS #	Weight %
Citric acid	77-92-9	10 - 30%
Hydroxyacetic acid	79-14-1	7 - 13%
Alcohol, C9-C11, ethoxylated	68439-46-3	7 - 13%
β -Alanine, N-(2-carboxyethyl)-N-dodecyl-, sodium salt	14960-06-6	1 - 5%
Sodium acrylate	7446-81-3	> 0.1 - < 1%

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.

Diluted Product:

Eyes: Rinse with plenty of water.

Skin: No specific first aid measures are required

Inhalation: No specific first aid measures are required

Ingestion: IF SWALLOWED: Call a Poison Center (1-800-851-7145) or doctor/physician if you feel unwell.

5. FIRE-FIGHTING MEASURES

Specific methods: No special methods required

Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

Specific hazards: Corrosive material (See sections 8 and 10).

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. 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: Can react to release hazardous gases. Do not mix with other products or chemicals except as directed on the label. Mix only with water. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not taste or swallow. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. Avoid breathing vapors or mists.

Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Absorb spillage to prevent material damage. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage: Store in corrosive-resistant container with a resistant inner liner.

Aerosol Level (if applicable): Not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Undiluted Product:

Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

It is the responsibility of the employer to determine the potential risk of exposure to hazardous chemicals for employees in the workplace in order to determine the necessity, selection, and use of personal protective equipment.

Eye protection:	Chemical-splash goggles.
Hand protection:	Chemical-resistant gloves.
Skin and body protection:	If major exposure is possible, wear suitable protective clothing and footwear.
Respiratory protection:	No personal protective equipment required under normal use conditions. If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

Diluted Product:

Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels.

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 , Red
Evaporation Rate: No information available	Odor: Fresh
Odor threshold: No information available.	Boiling point/range: Not determined
Decomposition temperature: Not determined	Autoignition temperature: No information available
Solubility: Completely Soluble	Solubility in other solvents: No information available
Relative Density (relative to water): 1.13	Density: 1.1328 Kg/L
Vapor density: No information available	Bulk density: No information available
Vapor pressure: No information available.	Flash point (°F): > 200 °F > 93 °C
Partition coefficient (n-octanol/water): No information available	Viscosity: 0
Elemental Phosphorus: 0.00 % by wt.	VOC: 0.1 % *
pH: < 2	Flammability (Solid or Gas): Not applicable
Corrosion to metals: Metal corrosive	Sustained combustion: The product does not sustain combustion
Explosion limits: - upper: Not determined - lower: Not determined	

Dilution pH:

≈ 2.6

Dilution Flash Point (°F): > 200 °F > 93.4 °C

VOC % by wt. at use dilution: 0.002 %

* - 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

Possibility of hazardous reactions: May vigorously react with strong alkaline products resulting in spattering and excessive heat.
Hazardous decomposition products: None reasonably foreseeable.
Materials to avoid: Strong bases. Ammonia. Do not mix with chlorinated products (such as bleach). Do not mix with any other product or chemical unless specified in the use directions.
Conditions to avoid: None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Skin contact, Inhalation, Ingestion, Eye contact

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: Causes burns/ serious damage to mouth, throat and stomach. Symptoms may include stomach pain and nausea.

Inhalation: May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.

Sensitization: No known effects.

Target Organs (SE): None known

Target Organs (RE): None known

Numerical measures of toxicity

ATE - Oral (mg/kg): >5000

ATE - Inhalatory, vapors (mg/l): >50

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 (undiluted product): This product, as sold, if discarded or disposed, is 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.

Waste from residues / unused products (diluted product): 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.

RCRA Hazard Class (undiluted product): D002 Corrosive Waste

RCRA Hazard Class (diluted product): Not Regulated

Contaminated Packaging: Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT/TDG/IMDG: The information provided below is the full transportation classification for this product. This description does not account for the package size(s) of this product, that may fall under a quantity exception, according to the applicable transportation regulations. When shipping dangerous goods, please consult with your internal, certified hazardous materials specialist to determine if any exceptions can be applied to your shipment.

DOT (Ground) Bill of Lading Description: UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (citric acid, hydroxyacetic acid), 8, III.

IMDG (Ocean) Bill of Lading Description: UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (citric acid, hydroxyacetic acid), 8, III

15. REGULATORY INFORMATION

International Inventories at CAS# Level

TSCA

All components are listed or otherwise exempt

DSL

All components are listed on DSL/NDSL or otherwise exempt.

RIGHT TO KNOW (RTK)

Ingredient(s)	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:
Water	7732-18-5	-	-	-	-
Citric acid	77-92-9	-	-	-	-
Hydroxyacetic acid	79-14-1	-	-	-	-
Alcohol, C9-C11, ethoxylated	68439-46-3	-	-	-	-
β-Alanine, N-(2-carboxyethyl)-N-dodecyl-, sodium salt	14960-06-6	-	-	-	-
Sodium acrylate	7446-81-3	-	-	-	-
Acetophenone	98-86-2	X	X	X	X
n-Hexane	110-54-3	X	X	X	X

CERCLA/ SARA

16. OTHER INFORMATION

NFPA (National Fire Protection Association)

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

Health 1

Flammability 0

Instability 0

Special Hazards -

Diluted Product:

Health 0

Flammability 0

Instability 0

Special Hazards -

Revision: 2021-02-25

Version: 02.1

Reason for revision:

Not applicable

Prepared by:

North American Regulatory Affairs

Additional advice:

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

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