



## ROOM CARE R2 - PLUS

Revision: 2018-07-02

Version: 01.0

### SECTION 1: Identification of the substance/mixture and supplier

#### 1.1 Product identifier

**Product name:** ROOM CARE R2 - PLUS

#### 1.2 Recommended use and restrictions on use

**Identified uses:**

Hard surface cleaner

**Restrictions of use:**

Uses other than those identified are not recommended

#### 1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD.

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: +64 9 813 9800; 0800 803 615 (toll free)

Fax: + 64 9 813 9801

Website: www.diversey.com

#### 1.4 Emergency telephone number

Call 0800 243 622 (24 hrs)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**HSNO Classification**

6.1D - Acutely toxic (oral)

6.3A - Irritating to the skin

6.5B - Contact sensitisers

8.1A - Corrosive to metals

8.3A - Corrosive to ocular tissue

9.1A - Very ecotoxic in the aquatic environment

9.3C - Harmful to terrestrial vertebrates

**GHS Equivalent Classification**

Acute toxicity, oral, Category 4

Skin irritation, Category 2

Skin sensitisation, Category 1

Corrosive to metals, Category 1

Serious eye damage, Category 1

Acute aquatic toxicity, Category 1

Terrestrial vertebrates, Category 3

#### 2.2 Label elements



**Signal word:** Danger

**Hazard statements:**

H302 - Harmful if swallowed.

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H400 - Very toxic to aquatic life.

H433 - Harmful to terrestrial vertebrates.

H290 - May be corrosive to metals.

**Prevention statement(s):**

**ROOM CARE R2 - PLUS**

P233 - Keep container tightly closed.  
 P234 - Keep only in original packaging.  
 P264 - Wash face, hands and any exposed skin thoroughly after handling.  
 P270 - Do not eat, drink or smoke when using this product.  
 P272 - Contaminated work clothing should not be allowed out of the workplace.  
 P280 - Wear protective gloves, protective clothing and eye or face protection.

**Response statement(s):**

P301 + P312 - IF SWALLOWED: Call a POISON CENTRE, doctor or physician if you feel unwell.  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
 P332 + P313 - If skin irritation occurs: Get medical advice or attention.  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 - Immediately call a POISON CENTRE, doctor or physician.  
 P321 - Specific treatment (see supplemental first aid instructions on this label).  
 P330 - Rinse mouth.  
 P362 - Take off contaminated clothing.  
 P390 - Absorb spillage to prevent material damage.

**Storage statement(s):**

P406 - Store in corrosive-resistant container with a resistant inner liner.

**Disposal statement(s):**

P501 - Dispose of unused content as chemical waste.

**2.3 Other hazards**

No other hazards known.

**2.4 Classification diluted product:**

Recommended maximum concentration (%): 9.1

**HSNO Classification**

6.3B - Mildly irritating to the skin

9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

**GHS Equivalent Classification**

Skin irritation, Category 3

Acute aquatic toxicity, Category 2

**2.5 Label elements diluted product**

H316 - Causes mild skin irritation.

H401 - Toxic to aquatic life.

**SECTION 3: Composition/information on ingredients****3.1 Substances / Mixtures**

Ingredient(s)	CAS number	EC number	Weight percent
alkyl alcohol ethoxylate	69011-36-5	Polymer*	10-30
didecyldimethylammonium chloride	7173-51-5	230-525-2	3-10
alkyldimethylbenzylammoniumchloride	68424-85-1	270-325-2	3-10
alkyl alcohol ethoxylate	69011-36-5	Polymer*	1-3
sodium carbonate	497-19-8	207-838-8	1-3
propan-2-ol	67-63-0	200-661-7	1-3
2-aminoethanol	141-43-5	205-483-3	0.1-1

Non-hazardous ingredients are the remainder and add up to 100%.

Workplace exposure limit(s), if available, are listed in subsection 8.1.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident.

**Inhalation:**

Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.

**Skin contact:**

Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before re-use. If skin irritation or rash occurs: Get medical advice or attention. If skin irritation occurs: Get medical advice or attention.

**ROOM CARE R2 - PLUS**

<b>Eye contact:</b>	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.
<b>Ingestion:</b>	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Call a POISON CENTRE, doctor or physician. Get medical attention or advice if you feel unwell.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.
<b>First aid facilities:</b>	Eyewash facilities should be considered in a workplace where necessary.

**4.2 Most important symptoms and effects, both acute and delayed**

<b>Inhalation:</b>	No known effects or symptoms in normal use.
<b>Skin contact:</b>	Causes irritation. May cause an allergic skin reaction.
<b>Eye contact:</b>	Causes severe or permanent damage.
<b>Ingestion:</b>	No known effects or symptoms in normal use.

**4.3 Indication of any immediate medical attention and special treatment needed**

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

**Poison Information Center:** Call 0800 764 766 (0800 POISON)

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

**5.2 Special hazards arising from the substance or mixture**

No special hazards known.

**5.3 Advice for firefighters**

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

**5.4 Hazchem code**

2X

2 - Fine water spray

X - Liquid-tight chemical protective clothing and breathing apparatus. Contain.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear suitable protective clothing, gloves and eye/face protection.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

**6.3 Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

**6.4 Reference to other sections**

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

**Measures required to protect the environment:**

For environmental exposure controls see subsection 8.2.

**Advices on general occupational hygiene:**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

## ROOM CARE R2 - PLUS

**7.3 Specific end use(s)**

No specific advice for end use available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Workplace exposure limits**

Air limit values, if available:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
propan-2-ol	400 ppm 983 mg/m <sup>3</sup>	500 ppm 1230 mg/m <sup>3</sup>	
2-aminoethanol	3 ppm 7.5 mg/m <sup>3</sup>	6 ppm 15 mg/m <sup>3</sup>	

Biological limit values, if available:

**8.2 Exposure controls**

*The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.*

*Recommended safety measures for handling the undiluted product:*

*Covering activities such as filling and transfer of product to application equipment, flasks or buckets*

**Appropriate engineering controls:** If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**Personal protective equipment****Eye / face protection:**

Safety glasses or goggles (EN 166).

**Hand protection:**

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.  
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm  
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm  
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

**Body protection:**

Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

**Respiratory protection:**

No special requirements under normal use conditions.

**Environmental exposure controls:**

Should not reach sewage water or drainage ditch undiluted or unneutralised.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (%):** 9.1

**Appropriate engineering controls:** Use only in well ventilated areas.

**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

**Personal protective equipment****Eye / face protection:**

No special requirements under normal use conditions.

**Hand protection:**

No special requirements under normal use conditions.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

**Environmental exposure controls:**

No special requirements under normal use conditions.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Method / remark**

**Physical State:** Liquid

**Colour:** Clear, Green

**Odour:** Product specific Slightly perfumed

**Odour threshold:** Not applicable

## ROOM CARE R2 - PLUS

pH: ≈ 11 (neat)

**Melting point/freezing point (°C):** Not determined

**Initial boiling point and boiling range (°C):** Not determined

**Flash point (°C):** > 93.4

**Sustained combustion:** Not applicable.

( UN Manual of Tests and Criteria, section 32, L.2 )

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not applicable to liquids

**Upper/lower flammability limit (%):** Not determined

**Vapour pressure:** Not determined

**Vapour density:** Not determined

**Relative density:** ≈ 1.03 (20 °C)

**Solubility in / Miscibility with Water:** Fully miscible

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

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not applicable.

**Viscosity:** ≈ 40 mPa.s (20 °C)

**Explosive properties:** Not explosive.

**Oxidising properties:** Not oxidising

ISO 4316

Not relevant to classification of this product

See substance data

closed cup

Not relevant to classification of this product

See substance data

See substance data

Not relevant to classification of this product

OECD 109 (EU A.3)

Not explosive, based on substance properties

Not oxidising, based on substance properties

## 9.2 Other information

**Surface tension (N/m):** Not determined

**Corrosion to metals:** Corrosive

Not relevant to classification of this product

UN Manual of Tests and Criteria, section 37

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal storage and use conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

### 10.4 Conditions to avoid

None known under normal storage and use conditions.

### 10.5 Incompatible materials

Reacts with acids.

### 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Mixture data:

#### Relevant calculated ATE(s):

ATE - Oral (mg/kg): 1800

ATE - Dermal (mg/kg): >5000

ATE - Inhalatory, mists (mg/l): >5

#### Skin irritation and corrosivity

**Result:** Skin irritant 2

**Method:** Bridging

Substance data, where relevant and available, are listed below:

#### Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 300 - 2000	Rat	OECD 423 (EU B.1 tris)	
didecyldimethylammonium chloride	LD <sub>50</sub>	238	Rat	Method not given	
alkyldimethylbenzylammoniumchloride	LD <sub>50</sub>	398	Rat		
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 2000	Rat	OECD 423 (EU B.1 tris)	
sodium carbonate	LD <sub>50</sub>	2800	Rat	Method not given	
propan-2-ol	LD <sub>50</sub>	3570	Rat	Method not given	
2-aminoethanol	LD <sub>50</sub>	1515	Rat	OECD 401 (EU B.1)	

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## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
didecyldimethylammonium chloride		No data available			
alkyldimethylbenzylammoniumchloride	LD <sub>50</sub>	3412	Rabbit	Method not given	
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 2000	Rat		
sodium carbonate	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
propan-2-ol	LD <sub>50</sub>	> 2000	Rabbit	Method not given	
2-aminoethanol	LD <sub>50</sub>	1025	Rabbit	Method not given	

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
didecyldimethylammonium chloride		No data available			
alkyldimethylbenzylammoniumchloride		No data available			
alkyl alcohol ethoxylate		No data available			
sodium carbonate	LC <sub>50</sub>	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
propan-2-ol	LC <sub>50</sub>	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
2-aminoethanol		No mortality observed	Rat	Non guideline test	6

## Irritation and corrosivity

## Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	
didecyldimethylammonium chloride	Corrosive	Rabbit	OECD 404 (EU B.4)	
alkyldimethylbenzylammoniumchloride	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	Not irritant	Rabbit	Weight of evidence Non guideline test	
sodium carbonate	Not irritant	Rabbit	Method not given	
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	
didecyldimethylammonium chloride	No data available			
alkyldimethylbenzylammoniumchloride	Severe damage		Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence Non guideline test	
sodium carbonate	Irritant	Rabbit	Method not given	
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
didecyldimethylammonium chloride	No data available			
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			
sodium carbonate	No data available			
propan-2-ol	No data available			
2-aminoethanol	Irritating to respiratory tract		Method not given	

## Sensitisation

## Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
didecyldimethylammonium chloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
alkyldimethylbenzylammoniumchloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	

## ROOM CARE R2 - PLUS

alkyl alcohol ethoxylate	Not sensitising	Guinea pig	
sodium carbonate	Not sensitising		Method not given
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
didecyltrimethylammonium chloride	No data available			
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			
sodium carbonate	No data available			
propan-2-ol	No data available			
2-aminoethanol	No data available			

## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
alkyl alcohol ethoxylate	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
didecyltrimethylammonium chloride	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476	No data available	
alkyldimethylbenzylammoniumchloride	No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
alkyl alcohol ethoxylate	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	Weight of evidence
sodium carbonate	No data available		No data available	
propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results	OECD 471 (EU B.12/13)	No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
2-aminoethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Mouse lymphoma)	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)

## Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
didecyltrimethylammonium chloride	No data available
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
propan-2-ol	No data available
2-aminoethanol	No evidence for carcinogenicity, weight-of-evidence

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards
didecyltrimethylammonium chloride			No data available				
alkyldimethylbenzylammoniumchloride			No data available				
alkyl alcohol ethoxylate			-		Weight of evidence		No evidence for reproductive toxicity No evidence for teratogenic effects
sodium carbonate			No data available				
propan-2-ol			No data available				
2-aminoethanol	NOAEL	Developmental toxicity	> 75	Rabbit	OECD 414 (EU B.31), oral	6 - 15 day(s)	No evidence for developmental toxicity No evidence for reproductive toxicity

## Repeated dose toxicity

## Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
didecyltrimethylammonium chloride		No data				

## ROOM CARE R2 - PLUS

		available				
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate		No data available				
sodium carbonate		No data available				
propan-2-ol		No data available				
2-aminoethanol	NOAEL	300	Rat		75	

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
didecyldimethylammonium chloride		No data available				
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate		No data available				
sodium carbonate		No data available				
propan-2-ol		No data available				
2-aminoethanol		No data available				

## Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
didecyldimethylammonium chloride		No data available				
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate		No data available				
sodium carbonate		No data available				
propan-2-ol		No data available				
2-aminoethanol		No data available				

## Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	
didecyldimethylammonium chloride			No data available					
alkyldimethylbenzylammoniumchloride			No data available					
alkyl alcohol ethoxylate			No data available					
sodium carbonate			No data available					
propan-2-ol			No data available					
2-aminoethanol			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
didecyldimethylammonium chloride	No data available
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	Not applicable
sodium carbonate	No data available
propan-2-ol	No data available
2-aminoethanol	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
didecyldimethylammonium chloride	No data available



## ROOM CARE R2 - PLUS

alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	Not applicable
sodium carbonate	No data available
propan-2-ol	No data available
2-aminoethanol	No data available

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

**SECTION 12: Ecological information****12.1 Toxicity**

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC <sub>50</sub>	1 - 10	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96
didecyldimethylammonium chloride	LC <sub>50</sub>	0.97	<i>Brachydanio rerio</i>	OECD 203 (EU C.1)	96
alkyldimethylbenzylammoniumchloride	LC <sub>50</sub>	0.515	<i>Fish</i>	Method not given	96
alkyl alcohol ethoxylate	LC <sub>50</sub>	1 - 10	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96
sodium carbonate	LC <sub>50</sub>	300	<i>Lepomis macrochirus</i>	Method not given	96
propan-2-ol	LC <sub>50</sub>	> 100	<i>Pimephales promelas</i>	Method not given	48
2-aminoethanol	LC <sub>50</sub>	349	<i>Cyprinus carpio</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC <sub>50</sub>	1 - 10	<i>Daphnia magna Straus</i>	OECD 202, static	48
didecyldimethylammonium chloride	EC <sub>50</sub>	0.053	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
alkyldimethylbenzylammoniumchloride	EC <sub>50</sub>	0.016	<i>Daphnia</i>	Method not given	48
alkyl alcohol ethoxylate	EC <sub>50</sub>	1 - 10	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
sodium carbonate	EC <sub>50</sub>	265	<i>Daphnia magna Straus</i>	Method not given	96
propan-2-ol	EC <sub>50</sub>	> 100	<i>Daphnia magna Straus</i>	Method not given	48
2-aminoethanol	EC <sub>50</sub>	65	<i>Daphnia magna Straus</i>	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC <sub>50</sub>	1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
didecyldimethylammonium chloride	EC <sub>50</sub>	0.053	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72
alkyldimethylbenzylammoniumchloride	EC <sub>50</sub>	0.02	<i>Selenastrum capricornutum</i>	OECD 201 (EU C.3)	72
alkyl alcohol ethoxylate	EC <sub>50</sub>	1 - 10	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
sodium carbonate		No data available			-
propan-2-ol	EC <sub>50</sub>	> 100	<i>Scenedesmus quadricauda</i>	Method not given	72
2-aminoethanol	NOEC	1	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data			-

## ROOM CARE R2 - PLUS

		available			
didecyltrimethylammonium chloride		No data available			-
alkyldimethylbenzylammoniumchloride		No data available			-
alkyl alcohol ethoxylate		No data available			-
sodium carbonate		No data available			-
propan-2-ol		No data available			-
2-aminoethanol		No data available			-

## Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC <sub>10</sub>	> 10000	Activated sludge	DIN 38412 / Part 8	17 hour(s)
didecyltrimethylammonium chloride		No data available			
alkyldimethylbenzylammoniumchloride	EC <sub>20</sub>	5	Activated sludge	OECD 209	0.5 hour(s)
alkyl alcohol ethoxylate	EC <sub>50</sub>	140	Activated sludge	Weight of evidence	17 hour(s)
sodium carbonate		No data available			
propan-2-ol	EC <sub>50</sub>	> 1000	Activated sludge	Method not given	
2-aminoethanol	EC <sub>50</sub>	> 1000	Activated sludge	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)

## Aquatic long-term toxicity

## Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
didecyltrimethylammonium chloride		No data available				
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate	NOEC	1.73	Not specified	QSAR Weight of evidence		
sodium carbonate		No data available				
propan-2-ol		No data available				
2-aminoethanol	NOEC	1.2	<i>Oryzias latipes</i>	OECD 210	30 day(s)	

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
didecyltrimethylammonium chloride	NOEC	> 0.01-0.1	<i>Daphnia magna</i>	OECD 211	21 day(s)	
alkyldimethylbenzylammoniumchloride	NOEC	0.025	<i>Daphnia magna</i>	OECD 211	21 day(s)	
alkyl alcohol ethoxylate	NOEC	1.36	<i>Daphnia magna</i>	QSAR Weight of evidence	21 hour(s)	
sodium carbonate		No data available				
propan-2-ol		No data available				
2-aminoethanol	NOEC	0.85	<i>Daphnia magna</i>	OECD 211	21 day(s)	

## Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
didecyltrimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium carbonate		No data			-	

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		available				
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	220	<i>Eisenia fetida</i>		-	
didecyltrimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate	LD <sub>50</sub>	> 1000	<i>Eisenia fetida</i>	OECD 207	14	
sodium carbonate		No data available			-	
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	10	<i>Lepidium sativum</i>	OECD 208	-	
didecyltrimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate	EC <sub>50</sub>	> 100	<i>Triticum aestivum</i> <i>Lepidium sativum</i> <i>Brassica alba</i>	OECD 208	-	
sodium carbonate		No data available			-	
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
didecyltrimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium carbonate		No data available			-	
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
didecyltrimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium carbonate		No data available			-	
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

## ROOM CARE R2 - PLUS

		available				
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Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available			-	
didecyldimethylammonium chloride		No data available			-	
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
sodium carbonate		No data available			-	
propan-2-ol		No data available			-	
2-aminoethanol		No data available			-	

## 12.2 Persistence and degradability

### Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	

Abiotic degradation - other processes, if available:

### Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
alkyl alcohol ethoxylate		CO <sub>2</sub> production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
didecyldimethylammonium chloride		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
alkyldimethylbenzylammoniumchloride		Oxygen depletion	> 60%	Read across	Readily biodegradable
alkyl alcohol ethoxylate		CO <sub>2</sub> production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium carbonate					Not applicable (inorganic substance)
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

## 12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	No data available			
didecyldimethylammonium chloride	No data available			
alkyldimethylbenzylammoniumchloride	2.88	OECD 107	No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available		Not relevant, does not bioaccumulate	
sodium carbonate	No data available		No bioaccumulation expected	
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
2-aminoethanol	- 1.91	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	No data available				
didecyldimethylammonium chloride	2.1		Method not given	No bioaccumulation expected	
alkyldimethylbenzylammoniumchloride	0.5		Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available				
sodium carbonate	No data available			No bioaccumulation expected	
propan-2-ol	No data available				
2-aminoethanol	No data available				

## ROOM CARE R2 - PLUS

## 12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment
didecyldimethylammonium chloride	No data available				
alkyldimethylbenzylammoniumchloride	No data available				
alkyl alcohol ethoxylate	No data available				
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
propan-2-ol	No data available				Potential for mobility in soil, soluble in water
2-aminoethanol	0.067		Model calculation		Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected

## 12.5 Other adverse effects

No other adverse effects known.

## SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

Waste from residues / unused products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

## Empty packaging

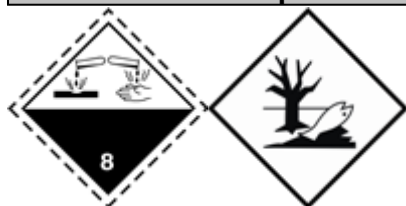
Recommendation:

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

## SECTION 14: Transport information

Land transport, Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 3267

14.2 UN proper shipping name:

Corrosive liquid, basic, organic, n.o.s. ( trisodium citrate , alkyldimethylbenzylammoniumchloride )

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

Hazchem code: 2X

IMO/IMDG

EmS: F-A, S-B

Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

## SECTION 15: Regulatory information

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

HSNO Approval Number

HSR002530.

Group standard

Cleaning Products (Subsidiary Hazard) Group Standard 2017

Inventory Listing(s)

New Zealand: NZIoC (New Zealand Inventory of Chemicals)

All components are listed on the NZIoC inventory, or are exempt

## SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

**ROOM CARE R2 - PLUS**

SDS code: MS32000266

Version: 01.0

Revision: 2018-07-02

**Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ):** Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

**Abbreviations and acronyms:**

- DNEL - Derived No Effect Limit
- AUH - GHS Specific hazard statement
- PNEC - Predicted No Effect Concentration
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number
- OECD - Organization for Economic Cooperation and Development

**End of Safety Data Sheet**