



## CYCLONE GLASS CLEANER

Revision: 2018-05-08

Version: 01.0

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

#### 1.1 Product identifier

**Product name:** CYCLONE GLASS CLEANER

#### 1.2 Recommended use and restrictions on use

**Identified uses:**

Glass 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**

6.3B - 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

#### 2.2 Label elements

**Hazard statements:**

H316 - Causes mild skin irritation.

#### 2.3 Other hazards

No other hazards known.

**GHS Equivalent Classification**

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
2-butoxyethanol	111-76-2	203-905-0	1-3
sodium dodecyl sulphate	151-21-3	205-788-1	0.1-1
ammonia	1336-21-6	215-647-6	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

**Inhalation:**

Get medical attention or advice if you feel unwell.

**Skin contact:**

Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

**Eye contact:**

Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.

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**Ingestion:** Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

**Self-protection of first aider:** Consider personal protective equipment as indicated in subsection 8.2.

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

**Inhalation:** No known effects or symptoms in normal use.  
**Skin contact:** No known effects or symptoms in normal use.  
**Eye contact:** No known effects or symptoms in normal use.  
**Ingestion:** 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**

*None allocated*

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

No special measures required.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

**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. Use personal protective equipment as required. 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.

**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:

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Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
2-butoxyethanol	25 ppm 121 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:

**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:** Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 166).  
**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
<b>Physical State:</b> Liquid	
<b>Colour:</b> Clear, Pale Blue	
<b>Odour:</b> Product specific	
<b>Odour threshold:</b> Not applicable	
<b>pH:</b> ≈ 10.5 (neat)	ISO 4316
<b>Melting point/freezing point (°C):</b> Not determined	Not relevant to classification of this product
<b>Initial boiling point and boiling range (°C):</b> Not determined	
<b>Flash point (°C):</b> Not applicable.	
<b>Sustained combustion:</b> Not applicable. ( UN Manual of Tests and Criteria, section 32, L.2 )	
<b>Evaporation rate:</b> Not determined	Not relevant to classification of this product
<b>Flammability (solid, gas):</b> Not applicable to liquids	
<b>Upper/lower flammability limit (%):</b> Not determined	
<b>Vapour pressure:</b> Not determined	
<b>Vapour density:</b> Not determined	Not relevant to classification of this product
<b>Relative density:</b> ≈ 1.0 (20 °C)	OECD 109 (EU A.3)
<b>Solubility in / Miscibility with Water:</b> Fully miscible	
<b>Partition coefficient: n-octanol/water</b> No information available. Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3	
<b>Autoignition temperature:</b> Not determined	
<b>Decomposition temperature:</b> Not applicable.	
<b>Viscosity:</b> Not determined	
<b>Explosive properties:</b> Not explosive.	
<b>Oxidising properties:</b> Not oxidising	

### 9.2 Other information

**Surface tension (N/m):** Not determined  
**Corrosion to metals:** Not corrosive

## 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): 4800

ATE - Dermal (mg/kg): >5000

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

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)
2-butoxyethanol	LD <sub>50</sub>	1746	Rat	Method not given	
sodium dodecyl sulphate	LD <sub>50</sub>	1200	Rat	Method not given	
ammonia	LD <sub>50</sub>	350	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
2-butoxyethanol	LD <sub>50</sub>	6411		Method not given	
sodium dodecyl sulphate	LD <sub>50</sub>	> 2000	Rat	Method not given	
ammonia		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-butoxyethanol	LC <sub>50</sub>	> 2 (mist)	Rat	Method not given	4
sodium dodecyl sulphate		No data available			
ammonia	LC <sub>50</sub>	7.035	Rat	Method not given	0.5

#### Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	Irritant	Rabbit	Method not given	
sodium dodecyl sulphate	Irritant	Rabbit	OECD 404 (EU B.4)	
ammonia	Corrosive		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium dodecyl sulphate	Severe damage	Rabbit	OECD 405 (EU B.5)	
ammonia	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	No data available			
sodium dodecyl sulphate	No data available			
ammonia	Irritating to respiratory tract		Method not given	

#### Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
2-butoxyethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium dodecyl sulphate	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	

			GPMT	
ammonia	Not sensitising		Method not given	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	No data available			
sodium dodecyl sulphate	No data available			
ammonia	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)
2-butoxyethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
sodium dodecyl sulphate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	OECD 475 (EU B.11)
ammonia	No evidence for mutagenicity		No evidence for mutagenicity	

## Carcinogenicity

Ingredient(s)	Effect
2-butoxyethanol	No evidence for carcinogenicity, negative test results
sodium dodecyl sulphate	No evidence for carcinogenicity, negative test results
ammonia	No data available

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
2-butoxyethanol			No data available				
sodium dodecyl sulphate	NOAEL	Teratogenic effects	250	Rat	OECD 414 (EU B.31), oral		
ammonia			No data available				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
2-butoxyethanol		No data available				
sodium dodecyl sulphate	NOAEL	488		OECD 408 (EU B.26)	90	
ammonia	NOAEL	68		Method not given		

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
2-butoxyethanol		No data available				
sodium dodecyl sulphate		No data available				
ammonia		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
2-butoxyethanol		No data available				
sodium dodecyl sulphate		No data available				
ammonia		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
2-butoxyethanol			No data available					
sodium dodecyl sulphate			No data available					
ammonia			No data available					

STOT-single exposure

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Ingredient(s)	Affected organ(s)
2-butoxyethanol	No data available
sodium dodecyl sulphate	No data available
ammonia	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
2-butoxyethanol	No data available
sodium dodecyl sulphate	No data available
ammonia	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)
2-butoxyethanol	LC <sub>50</sub>	> 100	<i>Fish</i>	Method not given	96
sodium dodecyl sulphate	LC <sub>50</sub>	4.1	<i>Fish</i>	Method not given	96
ammonia	LC <sub>50</sub>	0.56 - 2.48	<i>Fish</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-butoxyethanol	EC <sub>50</sub>	> 100	<i>Daphnia magna Straus</i>	Method not given	24
sodium dodecyl sulphate	LC <sub>50</sub>	3.15 - 3.8	<i>Daphnia</i>	Non guideline test	48
ammonia	EC <sub>50</sub>	1.1 - 22.8	<i>Daphnia magna Straus</i>	Method not given	-

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
2-butoxyethanol	EC <sub>50</sub>	> 100	<i>Not specified</i>	Method not given	168
sodium dodecyl sulphate	E <sub>r</sub> C <sub>50</sub>	> 120	<i>Not specified</i>	DIN 38412, Part 9	72
ammonia		No data available			-

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
2-butoxyethanol		No data available			-
sodium dodecyl sulphate		No data available			-
ammonia		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
2-butoxyethanol	EC <sub>0</sub>	700	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
sodium dodecyl sulphate	EC <sub>50</sub>	135	<i>Bacteria</i>	Method not given	3 hour(s)
ammonia		No data available			

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-butoxyethanol		No data available				

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sodium dodecyl sulphate	NOEC	> 1.357	<i>Not specified</i>	Method not given	42 day(s)	
ammonia		No data available				

## Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
2-butoxyethanol		No data available				
sodium dodecyl sulphate	NOEC	0.88	<i>Daphnia sp.</i>	US-EPA 1994	7 day(s)	
ammonia		No data available				

## 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
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		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
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		No data available			-	

## Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		No data available			-	

## Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		No data available			-	

## Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		No data available			-	

## Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
2-butoxyethanol		No data available			-	
sodium dodecyl sulphate		No data available			-	
ammonia		No data available			-	

## 12.2 Persistence and degradability

**Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
2-butoxyethanol			100 % in 28 day(s)	OECD 301B	Readily biodegradable
sodium dodecyl sulphate		CO <sub>2</sub> production	95% in 28 day(s)	OECD 301B	Readily biodegradable
ammonia					Not applicable (inorganic substance)

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 K<sub>ow</sub>)

Ingredient(s)	Value	Method	Evaluation	Remark
2-butoxyethanol	0.81	OECD 107	No bioaccumulation expected	
sodium dodecyl sulphate	≤ 2.03	Method not given	Low potential for bioaccumulation	
ammonia	0.23	Method not given	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
2-butoxyethanol	No data available				
sodium dodecyl sulphate	No data available				
ammonia	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
2-butoxyethanol	No data available				Potential for mobility in soil, soluble in water
sodium dodecyl sulphate	No data available				Potential for mobility in soil, soluble in water
ammonia	No data available				Low mobility in soil

**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:** Non-dangerous goods

**14.2 UN proper shipping name:** Non-dangerous goods

**14.3 Transport hazard class(es):** Non-dangerous goods

**14.4 Packing group:** Non-dangerous goods

**14.5 Environmental hazards:** Non-dangerous goods

**14.6 Special precautions for user:** Non-dangerous goods

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** Non-dangerous goods

**Other relevant information:**

Hazchem code: None allocated

**SECTION 15: Regulatory information**



## CYCLONE GLASS CLEANER

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

<b>HSNO Approval Number</b>	HSR002530.
<b>Group standard</b>	Cleaning Products (Subsidiary Hazard) Group Standard 2017
<b>Inventory Listing(s)</b>	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*

SDS code: MS32000089

Version: 01.0

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**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**