

**CLEARCLEAN PLUS**

Revision: 2017-01-30

Version: 01.0

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

**1.1 Product identifier**

**Product name** CLEARCLEAN PLUS

**1.2 Recommended use and restrictions on use**

**Identified uses:**

Degreaser

**Restrictions of use:**

Uses other than those identified are not recommended

**1.3 Details of the supplier**

SEALED AIR (NEW ZEALAND)

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

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

Fax: + 64 9 813 9801

Website: <http://www.sealedair.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**

6.3A - Irritating to the skin

6.4A - Irritating to the eye

**2.2 Label elements**



**Signal word:** Warning

**Hazard statements:**

H315 + H319 - Causes skin and serious eye irritation.

**Prevention statement(s):**

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves, protective clothing and eye or face protection.

**Response statement(s):**

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P332 + P313 - If skin irritation occurs: Get medical advice or attention.

P362 - Take off contaminated clothing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Disposal statement(s):**

P501 - Dispose of unused content as chemical waste.

**2.3 Other hazards**

No other hazards known.

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**2.4 Classification diluted product:**

Recommended maximum concentration (%): 16.7

Not classified as hazardous.

**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	3-10
sodium hydroxide	1310-73-2	215-185-5	1-3

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

\* Polymer.

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

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

<b>Inhalation:</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
<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. If eye irritation persists: Get medical advice or attention.
<b>Ingestion:</b>	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.
<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.
<b>Eye contact:</b>	Causes severe irritation.
<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) or +643 479 7248**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**

Turn off all sources of ignition. Ventilate the area. Wear suitable protective clothing, gloves and eye/face protection.

**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).

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**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:**

Keep away from flames and hot surfaces. No smoking. Keep away from heat. Take precautionary measures against static discharges.

**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 Sealed Air. 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. Avoid contact with eyes. Use only with adequate ventilation.

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

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container.

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:

Ingredient(s)	Long term value(s)	Short term value(s)	Ceiling value(s)
2-butoxyethanol	25 ppm 121 mg/m <sup>3</sup>		
sodium hydroxide			2 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:  $\geq$  480 min

Material thickness:  $\geq$  0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time:  $\geq$  30 min Material thickness:  $\geq$  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:** No special requirements under normal use conditions.

*Recommended safety measures for handling the diluted product:*

**Recommended maximum concentration (%):** 16.7

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

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**Appropriate organisational controls:** No special requirements under normal use conditions.

**Personal protective equipment**

**Eye / face protection:**

No special requirements under normal use conditions.

**Hand protection:**

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

No special requirements under normal use conditions.

**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

**Physical State:** Liquid

**Colour:** Clear, Red

**Odour:** Product specific

**Odour threshold:** Not applicable

**pH:** ≈ 13 (neat)

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

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

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not applicable.

**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:** ≈ 1.04 (approximately) (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:** Not determined

**Explosive properties:** Not explosive. Vapours may form explosive mixtures with air.

**Oxidising properties:** Not oxidising

#### Method / remark

ISO 4316

Not relevant to classification of this product

Not relevant to classification of this product

Not relevant to classification of this product  
OECD 109 (EU A.3)

Not relevant to classification of this product

### 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

Keep cool. Keep away from heat and direct sunlight. Store in a well-ventilated place.

### 10.5 Incompatible materials

Reacts with water and 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): >5000

ATE - Dermal (mg/kg): >5000

ATE - Inhalatory, mists (mg/l): >20  
 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 hydroxide		No data available			

#### 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 hydroxide		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 hydroxide		No data available			

### Irritation and corrosivity

#### Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	Irritant	Rabbit	Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	

#### Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

#### Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	No data available			
sodium hydroxide	No data available			

### 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 hydroxide	Not sensitising		Human repeated patch test	

#### Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
2-butoxyethanol	No data available			
sodium hydroxide	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 hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)

#### Carcinogenicity

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

## 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 hydroxide		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 hydroxide		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 hydroxide			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
2-butoxyethanol	No data available
sodium hydroxide	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
2-butoxyethanol	No data available
sodium hydroxide	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 hydroxide	LC <sub>50</sub>	35	<i>Various species</i>	Method not given	96

## Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
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		(mg/l)			time (h)
2-butoxyethanol	EC <sub>50</sub>	> 100	<i>Daphnia magna</i> Straus	Method not given	24
sodium hydroxide	EC <sub>50</sub>	40.4	<i>Ceriodaphnia</i> sp.	Method not given	48

## 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 hydroxide	EC <sub>50</sub>	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25

## Aquatic short-term toxicity - marine species

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

## Terrestrial toxicity - birds, if available:

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

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sodium hydroxide		No data available			-	
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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 hydroxide		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 hydroxide		No data available			-	

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

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)	Method not given	Readily biodegradable
sodium hydroxide					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 hydroxide	No data available		Not relevant, does not bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
2-butoxyethanol	No data available				
sodium hydroxide	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 hydroxide	No data available				Mobile 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.



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Suitable cleaning agents: Water, if necessary with cleaning agent.

**SECTION 14: Transport information****ADR, RID, ADN, IMO/IMDG, ICAO/IATA**

**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 73/78 and the IBC Code:** The product is not transported in bulk tankers.

Hazchem code: None allocated

**SECTION 15: Regulatory information****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 2006 Substances covered under this Group Standard will not require an approved handler.
<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:** MS32000074

**Version:** 01.0

**Revision:** 2017-01-30

**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
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LD50 - Lethal Dose, 50% / Median Lethal dose
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number

**End of Safety Data Sheet**