

Safety Data Sheet

KNOCKOUT

Revision: 2018-09-03

Version: 02.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier Product name: KNOCKOUT

1.2 Recommended use and restrictions on use Identified uses: Air deodoriser Cleaner/disinfectant 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 skin6.4A - Irritating to the eye9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action

GHS Equivalent Classification

Skin irritation, Category 3 Serious eye irritation, Category 2 Acute aquatic toxicity, Category 2

2.2 Label elements



Signal word: Warning

Hazard statements:

H316 - Causes mild skin irritation. H319 - Causes serious eye irritation. H401 - Toxic to aquatic life.

Prevention statement(s):

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

Response statement(s):

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.

2.4 Classification diluted product:

Recommended maximum concentration (%): 20

HSNO Classification

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
alkyldimethylbenzylammoniumchloride	68424-85-1	270-325-2	1-3
Ethyl butyrate	105-54-4	203-306-4	0.1-1
d-limonene	5989-27-5	227-813-5	0.1-1
benzyl acetate	140-11-4	205-399-7	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:	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 irritation occurs and persists, get medical attention.
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.
First aid facilities:	Eyewash facilities should be considered in a workplace where necessary.
4.2 Most important symptoms and effe	ects, both acute and delayed

4.2 MOSt important symptoms and energy	cis, 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:	Causes severe irritation.
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. 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 adviced 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. Avoid contact with eyes. 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. Keep from freezing. 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:

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:	No special requirements under normal use conditions.
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:	No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions. Recommended maximum concentration (%): 20

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State: Liquid Colour: Clear, Purple Odour: Perfumed Odour threshold: Not applicable pH: ≈ 6.3 (neat) Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined Method / remark

ISO 4316 Not relevant to classification of this product

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Flash point (°C): > 93.3 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: ≈ 1.001 (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. Oxidising properties: Not oxidising

9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Not corrosive 0 %P

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

None known under normal use conditions.

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

Skin irritation and corrosivityMethod:Non guideline test, EpidermResult: Not corrosiveMethod:Non guideline test, EpidermEye irritation and corrosivityMethod:Weight of evidence

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)
alkyldimethylbenzylammoniumchloride	LD 50	398	Rat		
Ethyl butyrate		No data available			
d-limonene	LD 50	4400 - 5100	Rat	Method not given	
benzyl acetate		No data available			

Acute derm	nal toxicity					
	Ingredient(s)	Endpoint	Value	Species	Method	Exposure
-						

closed cup

Not relevant to classification of this product

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

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		(mg/kg)			time (h)
alkyldimethylbenzylammoniumchloride	LD 50	3412	Rabbit	Method not given	
Ethyl butyrate		No data available			
d-limonene	LD 50	> 5000	Rabbit	Method not given	
benzyl acetate		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride		No data available			
Ethyl butyrate		No data available			
d-limonene		No data available			
benzyl acetate		No data available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Corrosive	Rabbit	Method not given	
Ethyl butyrate	No data available			
d-limonene	Irritant	Rabbit	Method not given	
benzyl acetate	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Severe damage		Method not given	
Ethyl butyrate	No data available			
d-limonene	No data available			
benzyl acetate	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
Ethyl butyrate	No data available			
d-limonene	No data available			
benzyl acetate	No data available			

Sensitisation Sensitisation by skin contact

Sensitisation by skill contact				
Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
Ethyl butyrate	No data available			
d-limonene	Sensitising	Guinea pig	Method not given	
benzyl acetate	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
Ethyl butyrate	No data available			
d-limonene	No data available			
benzyl acetate	No data available			

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

Ingredient(s)	Result (in-vitro)	Method	Result (in-vivo)	Method
		(in-vitro)		(in-vivo)
alkyldimethylbenzylammoniumchloride	No evidence of genotoxicity, negative	OECD 471 (EU	No evidence of genotoxicity, negative	OECD 474 (EU
	test results	B.12/13) OECD	test results	B.12)
		476 OECD 473		-
Ethyl butyrate	No data available		No data available	
d-limonene	No data available		No data available	
benzyl acetate	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect			
alkyldimethylbenzylammoniumchloride	No data available			

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Ethyl butyrate	No data available
d-limonene	No data available
benzyl acetate	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
alkyldimethylbenzylam moniumchloride			No data available				
Ethyl butyrate			No data				
			available				
d-limonene			No data				
			available				
benzyl acetate			No data				
			available				

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
alkyldimethylbenzylammoniumchloride		No data available				
Ethyl butyrate		No data available				
d-limonene		No data available				
benzyl acetate		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
alkyldimethylbenzylammoniumchloride		No data available				
-						
Ethyl butyrate		No data				
		available				
d-limonene		No data				
		available				
benzyl acetate		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
alkyldimethylbenzylammoniumchloride		No data available				
Ethyl butyrate		No data available				
d-limonene		No data available				
benzyl acetate		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
a lluid dias a thuidh a ran dia ra						ume	organs anected	
alkyldimethylbenzylam			No data					
moniumchloride			available					
Ethyl butyrate			No data					
			available					
d-limonene			No data					
			available					
benzyl acetate			No data					
-			available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyldimethylbenzylammoniumchloride	No data available
Ethyl butyrate	No data available
d-limonene	No data available
benzyl acetate	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyldimethylbenzylammoniumchloride	No data available
Ethyl butyrate	No data available
d-limonene	No data available
benzyl acetate	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

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	LC 50	0.515	Fish	Method not given	96
Ethyl butyrate		No data available			
d-limonene	LC 50	0.72	Pimephales promelas	OECD 203 (EU C.1)	96
benzyl acetate		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC 50	0.016	Daphnia	Method not given	48
Ethyl butyrate		No data available			
d-limonene	EC 50	0.36	Daphnia magna Straus	OECD 202 (EU C.2)	48
benzyl acetate		No data available			

Aquatic short-term toxicity - algae					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC 50	0.02	Selenastrum capricornutum	OECD 201 (EU C.3)	72
Ethyl butyrate		No data available			
d-limonene	Er C 50	150	Desmodesmus subspicatus	OECD 201 (EU C.3)	72
benzyl acetate		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyldimethylbenzylammoniumchloride		No data available			-
Ethyl butyrate		No data available			
d-limonene		No data available			-
benzyl acetate		No data available			

Impact on sewage plants - toxicity to bacteria					
Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyldimethylbenzylammoniumchloride	EC 20	5	Activated sludge	OECD 209	0.5 hour(s)
Ethyl butyrate		No data available			
d-limonene		No data available			
benzyl acetate		No data available			

Aquatic long-term toxicity Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
alkyldimethylbenzylammoniumchloride		No data				

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	available		
Ethyl butyrate	No data		
	available		
d-limonene	No data		
	available		
benzyl acetate	No data		
	available		

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyldimethylbenzylammoniumchloride	NOEC	0.025	Daphnia magna	OECD 211	21 day(s)	
Ethyl butyrate		No data available	magna			
d-limonene		No data available				
benzyl acetate		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
alkyldimethylbenzylammoniumchloride		No data available			-	
Ethyl butyrate		No data available				
d-limonene		No data available			-	
benzyl acetate		No data available				

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw soil)			time (days)	
alkyldimethylbenzylammoniumchloride		No data			-	
anylamenybenzylammenionae		available				
d-limonene		No data			-	
		available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyldimethylbenzylammoniumchloride		No data available			-	
d-limonene		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyldimethylbenzylammoniumchloride		No data			-	
		available				
d-limonene		No data			-	
		available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/kg dw			time (days)	
		soil)				
alkyldimethylbenzylammoniumchloride		No data			-	
		available				
d-limonene		No data			-	
		available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyldimethylbenzylammoniumchloride		No data available			-	
d-limonene		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

Diodegradation					
Ready biodegradability - aerobic conditions					
Ingredient(s)	Inoculum	Analytical	DT 50	Method	Evaluation
		method			
alkyldimethylbenzylammoniumchloride		Oxygen depletion	> 60%	Read across	Readily biodegradable
Ethyl butyrate					No data available
d-limonene			80 % in 28 day(s)	OECD 301D	Readily biodegradable
benzyl acetate					Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Ingredient(s)	Value	Method	Evaluation	Remark
alkyldimethylbenzylammoniumchloride	2.88	OECD 107	No bioaccumulation expected	
Ethyl butyrate	No data available			
d-limonene	No data available		High potential for bioaccumulation	
benzyl acetate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyldimethylbenzylam moniumchloride	0.5		Method not given	No bioaccumulation expected	
Ethyl butyrate	No data available				
d-limonene	683.1		Method not given	High potential for bioaccumulation	
benzyl acetate	No data available				

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
alkyldimethylbenzylammoniumchloride	No data available				
Ethyl butyrate	No data available				
d-limonene	No data available				High potential for mobility in soil
benzyl acetate	No data available				

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: Suitable cleaning agents:

Dispose of observing national or local regulations. 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
- Environmentally hazardous: No
- Marine pollutant: No

14.6 Special precautions for user: Non-dangerous goods

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

Other relevant information:

Hazchem code: None allocated

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

SDS code: MS32000206

Version: 02.0

Revision: 2018-09-03

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