



Shield Disinfectant

Revision: 2018-01-25

Version: 01.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Shield Disinfectant

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:

For professional use only.

AISE-P314 - Surface disinfectant. Manual process

Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Irrit. 2 (H315)

Eye Irrit. 2 (H319)

Aquatic Chronic 3 (H412)

2.2 Label elements



Signal word: Warning.

Hazard statements:

H315 + H319 - Causes skin and serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

2.3 Other hazards

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
alkyldimethylbenzylammoniumchloride	270-325-2	68424-85-1	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		1-3
alkyl alcohol ethoxylate	Polymer*	68439-46-3	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		1-3

* Polymer.

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

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[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16.

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. Take off immediately all contaminated clothing and wash it before re-use. 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 eye irritation persists: Get medical advice or 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.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No known effects or symptoms in normal use.
Skin contact:	Causes irritation.
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.

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.

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 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.

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. Keep from freezing.

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7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	-	-	-	3.4
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
alkyldimethylbenzylammoniumchloride	-	-	-	5.7
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
alkyldimethylbenzylammoniumchloride	-	-	-	3.4
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	-	-	-	3.96
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	-	-	-	1.64
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
alkyldimethylbenzylammoniumchloride	0.0009	0.00009	0.00016	0.4
alkyl alcohol ethoxylate	-	-	-	-

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
alkyldimethylbenzylammoniumchloride	0.267	0.0267	7	-
alkyl alcohol ethoxylate	-	-	-	-

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: 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:

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:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

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Environmental exposure controls: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 10

Appropriate engineering controls: No special requirements under normal use conditions.

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

Information in this section refers to the product, unless it is specifically stated that substance data is listed

	Method / remark
Physical State: Liquid	
Colour: Clear, Light, Brown	
Odour: Slightly perfumed	
Odour threshold: Not applicable	
pH: ≈ 10 (neat)	ISO 4316
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	See substance data

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
alkyldimethylbenzylammoniumchloride	> 107	Method not given	
alkyl alcohol ethoxylate	> 232.2	Method not given	

Flash point (°C): Not applicable.

Sustained combustion: Not applicable.

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

Evaporation rate: Not determined

Not relevant to classification of this product

Flammability (solid, gas): Not applicable to liquids

Upper/lower flammability limit (%): Not determined

See substance data

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
alkyldimethylbenzylammoniumchloride	-	-

Vapour pressure: Not determined

See substance data

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
alkyldimethylbenzylammoniumchloride	2300	Method not given	20
alkyl alcohol ethoxylate	< 10	Method not given	37.8

Vapour density: Not determined

Not relevant to classification of this product

Relative density: ≈ 1.00 (20 °C)

OECD 109 (EU A.3)

Solubility in / Miscibility with Water: Fully miscible

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyldimethylbenzylammoniumchloride	Soluble	Method not given	
alkyl alcohol ethoxylate	100 Soluble	Method not given	

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

Viscosity: Not determined

Not relevant to classification of this product

Explosive properties:

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Oxidising properties:

9.2 Other information

Surface tension (N/m): Not determined

Not relevant to classification of this product

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): >5000

ATE - Dermal (mg/kg): >5000

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

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	LD ₅₀	398	Rat		
alkyl alcohol ethoxylate	LD ₅₀	300 - 2000		Method not given	

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	LD ₅₀	800 - 1420	Rat	Method not given	
alkyl alcohol ethoxylate	LD ₅₀	2000 - 5000	Rat	Method not given	

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride		No data available			
alkyl alcohol ethoxylate		No data available			

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Corrosive		Method not given	
alkyl alcohol ethoxylate	Not irritant		Method not given	

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Severe damage		Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			

Ingredient(s)	Result	Species	Method	Exposure time (h)
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alkyldimethylbenzylammoniumchloride	Not sensitising		Method not given
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
alkyldimethylbenzylammoniumchloride	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results	OECD 473	No data available	

Ingredient(s)	Effect
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
alkyldimethylbenzylammoniumchloride			No data available				
alkyl alcohol ethoxylate	NOAEL		> 250	Rat	Not known		No effects on fertility No developmental toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate	NOAEL	80 - 400		Method not given		

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)	90	

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

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

Ingredient(s)	Affected organ(s)
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	No data available

Ingredient(s)	Affected organ(s)
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	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:

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Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	LC ₅₀	> 0.1-1	Fish	Method not given	96
alkyl alcohol ethoxylate	LC ₅₀	5 - 7	Fish	92/69/EEC, C1, semi-static	96

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC ₅₀	0.02	Daphnia	Method not given	48
alkyl alcohol ethoxylate	EC ₅₀	5.3	Daphnia	92/69/EEC	48

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC ₅₀	0.06	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	96
alkyl alcohol ethoxylate	EC ₅₀	1.4 - 47	Not specified	92/69/EEC	72

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

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyldimethylbenzylammoniumchloride	EC ₂₀	10	Activated sludge	OECD 209	0.5 hour(s)
alkyl alcohol ethoxylate	EC ₅₀	> 140	Bacteria	Method not given	3 hour(s)

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate	EC ₁₀	8.983	Not specified	Method not given	21 day(s)	

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate	EC ₁₀	2.579	<i>Daphnia sp.</i>	Method not given	21 day(s)	

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

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

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
alkyldimethylbenzylammoniumchloride		No data available			-	
alkyl alcohol ethoxylate		No data available			-	

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

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

12.2 Persistence and degradability

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
alkyldimethylbenzylammoniumchloride		Oxygen depletion	> 60%	Read across	Readily biodegradable
alkyl alcohol ethoxylate			60 % in 28 day(s)	Method not given	Readily biodegradable

12.3 Bioaccumulative potential

Ingredient(s)	Value	Method	Evaluation	Remark
alkyldimethylbenzylammoniumchloride	0.5 - 1.58	Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	3.11 - 4.19	Method not given	High potential for bioaccumulation	

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyldimethylbenzylammoniumchloride	0.5		Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	< 500		Method not given	High potential for bioaccumulation	

12.4 Mobility in soil

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
alkyldimethylbenzylammoniumchloride	No data available				
alkyl alcohol ethoxylate	No data available				Potential for mobility in soil, soluble in water

12.6 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.

European Waste Catalogue:

20 01 29* - detergents containing dangerous substances.

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

Class: -

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

SECTION 15: Regulatory information

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

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EU regulations:

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EU) No 528/2012 on biocidal products

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

SDS code: MS1003507

Version: 01.1

Revision: 2018-01-25

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:

- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

End of Safety Data Sheet