



Quatdet Clear

Revision: 2022-12-22

Version: 03.1

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

1.1 Product identifier

Trade name: Quatdet Clear

UFI: 39K1-90RW-D00Y-DAXT

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

Product use:	Surface disinfectant. for food contact surface disinfection For industrial use only..
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1
AISE_SWED_IS_8b_1
AISE_SWED_IS_1_1
AISE_SWED_IS_4_1
AISE_SWED_IS_7_2
AISE_SWED_IS_7_4
AISE_SWED_IS_7_5

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

Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin Corr. 1B (H314)
STOT RE 2 (H373)
Eye Dam. 1 (H318)
Aquatic Acute 1 (H400)
Aquatic Chronic 2 (H411)
Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains alkyl (C12-16) dimethylbenzyl ammonium chloride (Benzalkonium Chloride)

Hazard statements:

H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.

Quatdet Clear

H373 - May cause damage to organs through prolonged or repeated exposure.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements:

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	01-2119486762-27	Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT RE 2 (H373) Eye Dam. 1 (H318)		10-20
alkyl (C12-16) dimethylbenzyl ammonium chloride	270-325-2	68424-85-1	[6]	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 M=10 (H400) Aquatic Chronic 1 (H410)		3-10
Alcohols, C10-16, ethoxylated (7-<15 EO)	[4]	68002-97-1	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)		1-3

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

ATE, if available, are listed in section 11.

[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.

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

[6] Exempted: biocidal active. See Article 15(2) 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****General Information:**

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Get medical attention or advice if you feel unwell.

Inhalation:

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

Skin contact:

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. 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. Immediately call a POISON CENTRE, doctor or physician.

Ingestion:

Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

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 severe burns.

Eye contact:

Causes severe or permanent damage.

Ingestion:

Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

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

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

6.2 Environmental precautions

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

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

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 face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe spray. 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.

Comah - Lower Tier requirements (tonnes): 100

Comah - Upper Tier requirements (tonnes): 200

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:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
---------------	----------------------------	-------------------------------	---------------------------	------------------------------

tetrasodium ethylene diamine tetraacetate	-	-	-	25
alkyl (C12-16) dimethylbenzyl ammonium chloride	-	-	-	3.4
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
tetrasodium ethylene diamine tetraacetate	-	-	-	-
alkyl (C12-16) dimethylbenzyl ammonium chloride	-	-	-	5.7
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
tetrasodium ethylene diamine tetraacetate	-	-	-	-
alkyl (C12-16) dimethylbenzyl ammonium chloride	-	-	-	3.4
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	No data available	-

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
tetrasodium ethylene diamine tetraacetate	3	3	1.5	1.5
alkyl (C12-16) dimethylbenzyl ammonium chloride	-	-	-	3.96
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
tetrasodium ethylene diamine tetraacetate	1.2	1.2	0.6	-
alkyl (C12-16) dimethylbenzyl ammonium chloride	-	-	-	1.64
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43
alkyl (C12-16) dimethylbenzyl ammonium chloride	0.0009	0.00096	-	0.4
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-
alkyl (C12-16) dimethylbenzyl ammonium chloride	12.27	13.09	7	-
Alcohols, C10-16, ethoxylated (7-<15 EO)	-	-	-	-

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: 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.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic transfer and dilution	AISE_SWED_IS_8b_1	IS	PROC 8b	60	ERC4
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	ERC8a

Personal protective equipment

Eye / face protection:

Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Quatdet Clear

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

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

Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit exposure. Please refer to the product information sheet for the possibilities. Apply technical measures to comply with the occupational exposure limits, if available.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 5

Appropriate engineering controls: Provide a good standard of general ventilation. Ensure that foam equipment does not generate respirable particles.

Appropriate organisational controls: Employees and/or livestock should not be present in the treated facility during fogging.

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated closed system	AISE_SWED_IS_1_1	IS	PROC 1	480	ERC4
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a
Foam spraying	AISE_SWED_IS_7_2	IS	PROC 7	480	ERC4
Fogging	AISE_SWED_IS_7_4				
Spray application	AISE_SWED_IS_7_5				

Personal protective equipment

Eye / face protection:

Hand protection: Safety glasses or goggles (EN 166) are always recommended for foam applications.
Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
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: Spraying/fogging by machine application: If exposure to liquid particles cannot be avoided use: self-contained or compressed air breathing apparatus (EN 137 / EN 138) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

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 , Colourless	
Odour: Product specific	
Odour threshold: Not applicable	
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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
tetrasodium ethylene diamine tetraacetate	No data available	Non-experimental data	

Quatdet Clear

alkyl (C12-16) dimethylbenzyl ammonium chloride	Product decomposes before boiling		
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.

Flash point (°C): > 100 °C

Sustained combustion: Not applicable.

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

Lower and upper explosion limit/flammability limit (%): Not determined

closed cup

See substance data

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

pH: ≈ 10 (neat)

Kinematic viscosity: ≈ 10 mPa.s (20 °C)

Solubility in / Miscibility with water: Fully miscible

ISO 4316

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	500	Method not given	20
alkyl (C12-16) dimethylbenzyl ammonium chloride	Soluble	OECD 105 (EU A.6)	10
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

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

Method / remark

Vapour pressure: Not determined

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	0.0000000002	Read across	25
alkyl (C12-16) dimethylbenzyl ammonium chloride	0.006	OECD 104 (EU A.4)	25
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available		

Method / remark

Relative density: ≈ 1.08 (20 °C)

Relative vapour density: No data available.

Particle characteristics: No data available.

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties: Not explosive.

Oxidising properties: Not oxidising.

Corrosion to metals: Corrosive

9.2.2 Other safety characteristics

No other relevant information available.

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

May be corrosive to metals.

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): >2000

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

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)	ATE (mg/kg)
tetrasodium ethylene diamine tetraacetate	LD ₅₀	1780	Rat	OECD 401 (EU B.1)		16000
alkyl (C12-16) dimethylbenzyl ammonium chloride	LD ₅₀	> 300-2000	Rat	OECD 401 (EU B.1)		5500
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD ₅₀	≥ 1000		Read across		27000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
tetrasodium ethylene diamine tetraacetate	LD ₅₀	> 5000	Rabbit	Method not given		Not established
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	LD ₅₀	> 2000		Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LC ₅₀	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
tetrasodium ethylene diamine tetraacetate	Not established	13	Not established	Not established
alkyl (C12-16) dimethylbenzyl ammonium chloride	Not established	Not established	Not established	Not established
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl (C12-16) dimethylbenzyl ammonium chloride	Corrosive	Rabbit		
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not irritant	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	
alkyl (C12-16) dimethylbenzyl ammonium chloride	Severe damage	Rabbit		
Alcohols, C10-16, ethoxylated (7-<15 EO)	Severe damage	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl (C12-16) dimethylbenzyl ammonium chloride	Not sensitising	Guinea pig	OECD 406 (EU B.6) / Buehler test	
Alcohols, C10-16, ethoxylated (7-<15 EO)	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	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)
tetrasodium ethylene diamine tetraacetate	No evidence for mutagenicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available		No data available	
Alcohols, C10-16, ethoxylated (7-<15 EO)	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	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
tetrasodium ethylene diamine tetraacetate			No data available				No evidence for reproductive toxicity
alkyl (C12-16) dimethylbenzyl ammonium chloride			No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available		Literature		No evidence for teratogenic effects 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
tetrasodium ethylene diamine tetraacetate		No data available				
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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
tetrasodium ethylene diamine tetraacetate		No data available				
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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
tetrasodium ethylene diamine tetraacetate		No data available				
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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
tetrasodium ethylene diamine tetraacetate			No data available					
alkyl (C12-16) dimethylbenzyl ammonium chloride			No data available					
Alcohols, C10-16, ethoxylated (7-<15 EO)			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	No data available
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	Respiratory tract
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

11.2.2 Other information

No other relevant information available.

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)
tetrasodium ethylene diamine tetraacetate	LC ₅₀	> 100	<i>Lepomis macrochirus</i>	OPP 72-1, static (EPA)	96
alkyl (C12-16) dimethylbenzyl ammonium chloride	LC ₅₀	> 0.1-1	<i>Lepomis macrochirus</i>	OPP 72-1, static (EPA)	96
Alcohols, C10-16, ethoxylated (7-<15 EO)	LC ₅₀	> 1-10	<i>Brachydanio rerio</i>	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC ₅₀	140	<i>Daphnia magna</i> Straus	DIN 38412, Part 11	48
alkyl (C12-16) dimethylbenzyl ammonium chloride	EC ₅₀	> 0.01-0.1	<i>Daphnia magna</i> Straus	OECD 202 (EU C.2)	48
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	> 1-10	<i>Daphnia magna</i> Straus	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC ₅₀	> 100	<i>Scenedesmus obliquus</i>	88/302/EEC, Part C, static	72
alkyl (C12-16) dimethylbenzyl ammonium chloride	EC ₅₀	> 0.01-0.1	<i>Pseudokirchner</i>	OECD 201 (EU C.3)	72

Quatdet Clear

			<i>ielia subcapitata</i>		
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	> 1-10	<i>Desmodesmus subspicatus</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
tetrasodium ethylene diamine tetraacetate		No data available			
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	EC ₂₀	> 500	<i>Activated sludge</i>	OECD 209	0.5 hour(s)
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available			
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₅₀	140	<i>Activated sludge</i>	Method not given	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	> 25.7	<i>Brachydanio rerio</i>	OECD 210	35 day(s)	
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	25	<i>Daphnia magna</i>	OECD 211	21 day(s)	
alkyl (C12-16) dimethylbenzyl ammonium chloride	NOEC	> 0.01-0.1	<i>Daphnia magna</i>	OECD 211	21 day(s)	
Alcohols, C10-16, ethoxylated (7-<15 EO)	EC ₁₀	> 0.1-1	<i>Daphnia sp.</i>	OECD 211		

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
tetrasodium ethylene diamine tetraacetate		No data available				
alkyl (C12-16) dimethylbenzyl ammonium chloride		No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)		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
tetrasodium ethylene diamine tetraacetate	LD ₅₀	156	<i>Eisenia fetida</i>	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25			21	

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Quatdet Clear

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable. Inherently biodegradable.
alkyl (C12-16) dimethylbenzyl ammonium chloride	Activated sludge, aerobe	Oxygen depletion	63% in 28 day(s)	OECD 301D	Readily biodegradable
Alcohols, C10-16, ethoxylated (7-<15 EO)	Activated sludge, aerobe	Method not given	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT ₅₀	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	
alkyl (C12-16) dimethylbenzyl ammonium chloride	< 3	OECD 107	No bioaccumulation expected	at 20 °C
Alcohols, C10-16, ethoxylated (7-<15 EO)	3.55	QSAR	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	1.8	<i>Lepomis macrochirus</i>	OECD 305	Low potential for bioaccumulation	
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected
alkyl (C12-16) dimethylbenzyl ammonium chloride	No data available				
Alcohols, C10-16, ethoxylated (7-<15 EO)	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

Quatdet Clear

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 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:

16 03 05* - organic wastes 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 (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)****14.1 UN number:** 3267**14.2 UN proper shipping name:**

Corrosive liquid, basic, organic, n.o.s. (alkyltrimethylbenzylammoniumchloride)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III**14.5 Environmental hazards:**

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR**

Classification code: C7

Tunnel restriction code: (E)

Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code. 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****National regulations :**

- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- Biocidal Products Regulations 2001 (SI 2001/880)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

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

Comah - classification: E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

15.2 Chemical safety assessment

Quatdet Clear

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

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: MS1001787

Version: 03.1

Revision: 2022-12-22

Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 1, 3, 4, 6, 7, 8, 15, 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.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- ATE - Acute Toxicity Estimate
- DNEL - Derived No Effect Limit
- EC50 - effective concentration, 50%
- ERC - Environmental release categories
- EUH - CLP Specific hazard statement
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LCS - Life cycle stage
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- PROC - Process categories
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet