Safety Data Sheet

According to Regulation (EC) No 1907/2006

Diversey Degragerm Smartdose

Revision: 2012-05-14 *Version 03*

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

1.1 Product identifier
Trade name: Diversey Degragerm Smartdose

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
AISE-P315 - Surface disinfectant. Spray and rinse 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 Ltd

Contact details
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: MSDSinfoUK@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
The product has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

Indication of danger
C - Corrosive
N - Dangerous for the environment

Risk phrases:
R22 - Harmful if swallowed.
R34 - Causes burns.
R37 - Irritating to respiratory system.
R50 - Very toxic to aquatic organisms.

2.2 Label elements

C - Corrosive
N - Dangerous for the environment

Contains alkyldimethylbenzylammoniumchloride, 2-aminoethanol , N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine

Risk phrases:
R22 - Harmful if swallowed.
R34 - Causes burns.
R37 - Irritating to respiratory system.
R50 - Very toxic to aquatic organisms.

Safety phrases:
S23c - Do not breathe vapour.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28a - After contact with skin, wash immediately with plenty of water.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61b - Avoid release to the environment. Refer to safety data sheet.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

2.3 Other hazards
No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (EC) 1272/2008	Notes	Weight percent
alkyldimethylbenzylammoniumchloride	270-325-2	68424-85-1	No data available	C,N; R21/22-34-50	Skin Corr. 1B (H314) Aquatic Acute 1 (H400) Acute Tox. 4 (H302) Acute Tox. 4 (H312)		20-30
alkyl alcohol ethoxylate	Polymer*	69011-36-5	No data available	Xn; R22-41	Eye Dam. 1 (H318) Acute Tox. 4 (H302)		10-20
2-aminoethanol	205-483-3	141-43-5	01-2119486455-28	C; R20/21/22-34-37	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335)		3-10
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	219-145-8	2372-82-9	No data available	C,N; R22-35-48/22-50	Acute Tox. 3 (H301) Skin Corr. 1A (H314) STOT RE 2 (H373) Aquatic Acute 1 (H400)		1-3

* Polymer.
For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.
Workplace exposure limit(s), if available, are listed in subsection 8.1.
[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.

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.

Inhalation Remove from source of exposure. Get medical attention immediately.

Skin contact Rinse with plenty of water. Take off all contaminated clothing immediately. Get medical attention.

Eye contact Wash off immediately with plenty of water. Get medical attention immediately.

Ingestion Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention immediately.

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 Severe irritant, may cause respiratory tract irritation.

Skin contact Causes burns.

Eye contact Causes severe or permanent damage.

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

Sensitisation No known effects.

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
Ensure adequate ventilation. Do not breathe dust or vapour. Wear suitable protective clothing, gloves and eye/face protection.

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
Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Ensure adequate ventilation.

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
Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. Use only with adequate ventilation. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

Prevention of fire and explosion
No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage rooms / facilities:
In accordance with local and national regulations.

Combined storage in storage rooms / facilities:
In accordance with local and national regulations. For incompatible materials see subsection 10.5.

Basic storage conditions
Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

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)	UK - Long term value(s)	UK - Short term value(s)
2-aminoethanol	1 ppm 2.5 mg/m³	3 ppm 7.6 mg/m³

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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	No data available	No data available	No data available	3.75
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

DNEL 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)
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	No data available	No data available	No data available	1
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

DNEL 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)
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	No data available	No data available	No data available	0.24
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	No data available	No data available	3.3	3.3
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	No data available	No data available	2	2
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

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)
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	0.085	0.0085	No data available	100
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
alkyldimethylbenzylammoniumchloride	No data available	No data available	No data available	No data available
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
2-aminoethanol	0.425	No data available	0.035	0.025
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available	No data available	No data available	No data available

8.2 Exposure controls

General health and safety measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Wash hands before breaks and at the end of workday. Do not breathe gases, vapour, spray or aerosols. Avoid contact with skin and eyes.

The following information applies for the uses indicated in subsection 1.2.
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.

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: >= 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.
Respiratory protection:	Respiratory protection is not normally required However, inhalation of vapour, spray, gas or aerosols should be avoided
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 (%): 2

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

Physical State:	Liquid
Colour	Clear Green
Odour	Slightly perfumed
pH:	≈ 11 (neat)
Boiling point/range (°C):	Not determined
Flash point (°C):	Not applicable.
Flammability	Not flammable.
Specific gravity:	1.05 g/cm³ (20°C)
Solubility in / Miscibility with	**Water:** Fully miscible
Explosive properties	Not explosive.
Oxidising properties:	Not oxidising.

9.2 Other information
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
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
Mixtures
No test data is available on the mixture

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}	795	Rat	Method not given	
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	LD_{50}	1515	Rat	OECD 401 (EU B.1)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	LD_{50}	> 50	Rat		

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	LD_{50}	1560	Rat	Method not given	
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	LD_{50}	2504	Rabbit	OECD 402 (EU B.3)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride		No data available			
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	LC_{50}	> 1.3	Rat		
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Irritant			
alkyl alcohol ethoxylate	No data available			
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Corrosive			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	Severe damage			
alkyl alcohol ethoxylate	No data available			
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			
2-aminoethanol	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	Sensitising			
alkyl alcohol ethoxylate	No data available			
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	Not sensitising			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyldimethylbenzylammoniumchloride	No data available			
alkyl alcohol ethoxylate	No data available			
2-aminoethanol	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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				
alkyl alcohol ethoxylate		No data available				
2-aminoethanol		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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				
alkyl alcohol ethoxylate		No data available				
2-aminoethanol		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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				
alkyl alcohol ethoxylate		No data available				
2-aminoethanol		No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		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
alkyldimethylbenzylammoniumchloride			No data available					
alkyl alcohol ethoxylate			No data available					
2-aminoethanol			No data available					
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			No data available					

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mixture data:

Based on available data, the classification criteria are not met.

Substance data, where relevant and available

Carcinogenicity

Ingredient(s)	Effect
alkyldimethylbenzylammoniumchloride	No data available
alkyl alcohol ethoxylate	No data available
2-aminoethanol	No data available
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available

Mutagenicity

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 data available		No data available	
2-aminoethanol	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No evidence for mutagenicity, negative test results		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
alkyldimethylbenzylammoniumchloride			No data available				
alkyl alcohol ethoxylate			No data available				
2-aminoethanol		Impaired fertility	No data available		Not known		No effects on fertility Indications of possible teratogenicity
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine			No data available				

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
Mixtures
No test 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)
alkyldimethylbenzylammoniumchloride	LC_{50}	1.7	Various species	Method not given	96
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	LC_{50}	349	Cyprinus carpio	(EC) 440/2008, C.1	96
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC_{50}	0.03	Daphnia	Method not given	48
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	EC_{50}	65	Daphnia magna Straus	OECD 202, static	48
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyldimethylbenzylammoniumchloride	EC_{50}	6	Desmodesmus subspicatus	Method not given	96
alkyl alcohol ethoxylate		No data available			
2-aminoethanol	EC_{50}	2.5	Pseudokirchneriella subcapitata	OECD 201	72
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyldimethylbenzylammoniumchloride		No data available			
alkyl alcohol ethoxylate		No data available			
2-aminoethanol		No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Impact on sewage plants - toxicity to bacteria

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		No data available			

2-aminoethanol	EC_{50}	> 1000	Activated sludge	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate		No data available				
2-aminoethanol	NOEC	1.2	Oryzias latipes	Method not given	30 day(s)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyldimethylbenzylammoniumchloride		No data available				
alkyl alcohol ethoxylate		No data available				
2-aminoethanol	NOEC	0.85	Daphnia magna	OECD 211	21 day(s)	
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
alkyldimethylbenzylammoniumchloride		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
alkyl alcohol ethoxylate					No data available
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		Oxygen depletion	> 70%	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyldimethylbenzylammoniumchloride	0.5 - 1.58			
alkyl alcohol ethoxylate	No data available			

2-aminoethanol	No data available			
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyldimethylbenzylammoniumchloride	No data available				
alkyl alcohol ethoxylate	No data available				
2-aminoethanol	No data available				
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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				
alkyl alcohol ethoxylate	No data available				
2-aminoethanol	No data available				Adsorption to solid soil phase is not expected
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	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.

12.6 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.

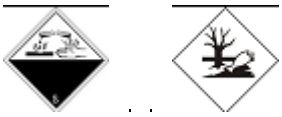
European Waste Catalogue: 20 01 15* - alkalines.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents Water, if necessary with cleaning agent.

SECTION 14: Transport information



ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: 3267

14.2 UN proper shipping name:

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

14.3 Transport hazard class(es):

Class:8

Label(s):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 73/78 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

Ingredients according to EC Detergents Regulation 648/2004
non-ionic surfactants 5 - 15%
disinfectants, perfumes, Limonene, Linalool, Eugenol

15.2 Chemical safety assessment
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

MSDS code: MSDS8015 **Version** 03 **Revision:** 2012-05-14

Reason for revision:
Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

Full text of the R, H and EUH phrases mentioned in section 3
- R34 - Causes burns.
- R50 - Very toxic to aquatic organisms.
- R41 - Risk of serious damage to eyes.
- R22 - Harmful if swallowed.
- R37 - Irritating to respiratory system.
- R35 - Causes severe burns.
- R21/22 - Harmful in contact with skin and if swallowed.
- R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
- R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- H301 - Toxic if swallowed.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H332 - Harmful if inhaled.
- H335 - May cause respiratory irritation.
- H373 - May cause damage to organs (a,b,c) through prolonged or repeated exposure if inhaled.
- H400 - Very toxic to aquatic life.

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

End of Safety Data Sheet