Safety Data Sheet

According to Regulation (EC) No 1907/2006

Actival F4r

Revision: 2018-01-25 **Version:** 02.3

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

1.1 Product identifier
Trade name: Actival F4r

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
For professional use only.
AISE-P401 - Floor cleaner. Semi-automatic process
AISE-P403 - Floor cleaner. 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 Corr. 1B (H314)

2.2 Label elements

Signal word: Danger.

Contains sodium hydroxide (Sodium Hydroxide).

Hazard statements:
H314 - Causes severe skin burns and eye damage.

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
sodium cumenesulphonate	239-854-6	15763-76-5	01-2119489411-37	Eye Irrit. 2 (H319)		3-10

alkyl alcohol ethoxylate	931-138-8	69011-36-5	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		3-10
alkyl alcohol alkoxylate	Polymer*	196823-11-7	[4]	Eye Irrit. 2 (H319)		3-10
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		3-10
alkyl alcohol ethoxylate	Polymer*	69011-36-5	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		1-3

* Polymer.
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.
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: 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.

Inhalation: 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. Take off immediately all contaminated clothing and wash it before re-use. Immediately call a POISON CENTRE, doctor or physician.

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, gloves and eye/face protection.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a closed container. Keep only in original container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
sodium hydroxide		2 mg/m³

Biological limit values, 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
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-

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)
sodium cumenesulphonate	-	-	-	7.6
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	2 %	-	-	-
alkyl alcohol ethoxylate	-	-	-	-

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)
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	2 %	-	-	-
alkyl alcohol ethoxylate	-	-	-	-

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
sodium cumenesulphonate	-	-	-	3.8
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	1	-
alkyl alcohol ethoxylate	-	-	-	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
sodium cumenesulphonate	-	-	-	13.2
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	1	-
alkyl alcohol ethoxylate	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)
sodium cumenesulphonate	0.23	-	2.3	100
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium cumenesulphonate	-	-	-	-
alkyl alcohol ethoxylate	-	-	-	-
alkyl alcohol alkoxylate	No data available	No data available	No data available	No data available
sodium hydroxide	-	-	-	-
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: 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. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

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

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: No special requirements under normal use conditions.

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 (%): 5

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, Colourless	
Odour: Product specific	
Odour threshold: Not applicable	
pH: > 12 (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

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
sodium cumenesulphonate	No data available		
alkyl alcohol ethoxylate	No data available		
alkyl alcohol alkoxylate	No data available		
sodium hydroxide	> 990	Method not given	
alkyl alcohol ethoxylate	> 200	Method not given	

	Method / remark
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	

Substance data, flammability or explosive limits, if available:

	Method / remark
Vapour pressure: Not determined	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium cumenesulphonate	No data available		
alkyl alcohol ethoxylate	< 100		
alkyl alcohol alkoxylate	No data available		
sodium hydroxide	< 1330	Method not given	20
alkyl alcohol ethoxylate	Negligible	Method not given	20-25

	Method / remark
Vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 1.05 (20 °C)	OECD 109 (EU A.3)
Solubility in / Miscibility with Water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
sodium cumenesulphonate	493 Soluble	Method not given	20
alkyl alcohol ethoxylate	Partly soluble	Method not given	20
alkyl alcohol alkoxylate	No data available		
sodium hydroxide	1000	Method not given	20
alkyl alcohol ethoxylate	Soluble	Method not given	20

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

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
Viscosity: ≈ mPa.s (20 °C)	Not relevant to classification of this product
Explosive properties: Not explosive.	
Oxidising properties: Not oxidising.	

9.2 Other information

Surface tension (N/m): Not determined	Not relevant to classification of this product
Corrosion to metals: Not corrosive	Weight of evidence

Substance data, dissociation constant, if 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

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

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)
sodium cumenesulphonate	LD_{50}	> 7000	Rat	Method not given	
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rat	OECD 423 (EU B.1 tris)	
alkyl alcohol alkoxylate		No data available			
sodium hydroxide		No data available			
alkyl alcohol ethoxylate	LD_{50}	> 300 - 2000	Rat	OECD 423 (EU B.1 tris)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium cumenesulphonate	LD_{50}	> 2000	Rabbit	Method not given	
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rat		
alkyl alcohol alkoxylate		No data available			
sodium hydroxide		No data available			
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium cumenesulphonate	LC_{50}	> 5 (mist) No mortality observed	Rat	Read across	3.87
alkyl alcohol ethoxylate		No data available			
alkyl alcohol alkoxylate		No data available			
sodium hydroxide		No data available			
alkyl alcohol ethoxylate		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium cumenesulphonate	Not irritant	Rabbit	OECD 404 (EU B.4)	
alkyl alcohol ethoxylate	Not irritant	Rabbit	Weight of evidence Non guideline test	
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium cumenesulphonate	Irritant	Rabbit	OECD 405 (EU B.5)	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Weight of evidence Non guideline test	
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	Corrosive	Rabbit	Method not given	
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium cumenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium cumenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
alkyl alcohol ethoxylate	Not sensitising	Guinea pig		
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	Not sensitising		Human repeated patch test	
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium cumenesulphonate	No data available			
alkyl alcohol ethoxylate	No data available			
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	No data available			
alkyl alcohol ethoxylate	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)
sodium cumenesulphonate	No evidence for mutagenicity, negative test results	Method not given	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12)
alkyl alcohol ethoxylate	No evidence for mutagenicity	OECD 471 (EU B.12/13)	No evidence for mutagenicity, negative test results	Weight of evidence
alkyl alcohol alkoxylate	No data available		No data available	
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
alkyl alcohol ethoxylate	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given

Carcinogenicity

Ingredient(s)	Effect
sodium cumenesulphonate	No evidence for carcinogenicity, negative test results
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol alkoxylate	No data available
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
alkyl alcohol ethoxylate	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

sodium cumenesulphonate	NOAEL	Teratogenic effects	> 936	Rat	Non guideline test		No known significant effects or critical hazards
alkyl alcohol ethoxylate			-		Weight of evidence		No evidence for reproductive toxicity No evidence for teratogenic effects
alkyl alcohol alkoxylate			No data available				
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards

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
sodium cumenesulphonate	NOAEL	763 - 3534	Rat	OECD 408 (EU B.26)		No effects observed
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		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
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		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
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate		No data available				
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		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
sodium cumenesulphonate			No data available					
alkyl alcohol ethoxylate			No data available					
alkyl alcohol alkoxylate			No data available					
sodium hydroxide			No data available					
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium cumenesulphonate	Not applicable
alkyl alcohol ethoxylate	Not applicable
alkyl alcohol alkoxylate	No data available
sodium hydroxide	No data available
alkyl alcohol ethoxylate	Not applicable

STOT-repeated exposure

Ingredient(s)	Affected organ(s)

sodium cumenesulphonate	Not applicable
alkyl alcohol ethoxylate	Not applicable
alkyl alcohol alkoxylate	No data available
sodium hydroxide	No data available
alkyl alcohol ethoxylate	Not applicable

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

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

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

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

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium cumenesulphonate	LC_{50}	> 1000	*Fish*	EPA-OPPTS 850.1075	96
alkyl alcohol ethoxylate	LC_{50}	1 - 10	*Cyprinus carpio*	OECD 203 (EU C.1)	96
alkyl alcohol alkoxylate		No data available			
sodium hydroxide	LC_{50}	35	*Various species*	Method not given	96
alkyl alcohol ethoxylate	LC_{50}	1 - 10	*Cyprinus carpio*	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium cumenesulphonate	EC_{50}	> 100	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
alkyl alcohol alkoxylate		No data available			
sodium hydroxide	EC_{50}	40.4	*Ceriodaphnia sp.*	Method not given	48
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Daphnia magna Straus*	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium cumenesulphonate	EC_{50}	> 230	*Not specified*	EPA OPPTS 850.5400	96
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
alkyl alcohol alkoxylate		No data available			
sodium hydroxide	EC_{50}	22	*Photobacterium phosphoreum*	Method not given	0.25
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Desmodesmus subspicatus*	OECD 201, static	72

Aquatic short-term toxicity - marine species

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

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value	Inoculum	Method	Exposure

		(mg/l)			time
sodium cumenesulphonate	$E_r C_{50}$	> 1000	*Bacteria*	OECD 209	3 hour(s)
alkyl alcohol ethoxylate	EC_{50}	140	*Activated sludge*	Weight of evidence	17 hour(s)
alkyl alcohol alkoxylate		No data available			
sodium hydroxide		No data available			
alkyl alcohol ethoxylate	EC_{10}	> 10000	*Activated sludge*	DIN 38412 / Part 8	17 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate	NOEC	1.73	*Not specified*	QSAR Weight of evidence		
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium cumenesulphonate		No data available				
alkyl alcohol ethoxylate	NOEC	1.36	*Daphnia magna*	QSAR Weight of evidence	21 hour(s)	
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available				
alkyl alcohol ethoxylate		No data available				

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

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate		No data available			-	
alkyl alcohol alkoxylate		No data available				
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate		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
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate	LD_{50}	> 1000	*Eisenia fetida*	OECD 207	14	
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate	NOEC	220	*Eisenia fetida*		-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium cumenesulphonate		No data available			-	
alkyl alcohol ethoxylate	EC_{50}	> 100	*Triticum aestivum Lepidium sativum Brassica alba*	OECD 208	-	
sodium hydroxide		No data available			-	
alkyl alcohol ethoxylate	NOEC	10	*Lepidium*	OECD 208	-	

			sativum			

Terrestrial toxicity - birds, if available:

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

Terrestrial toxicity - beneficial insects, if available:

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

Terrestrial toxicity - soil bacteria, if available:

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

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

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

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
sodium cumenesulphonate		CO_2 production	103 - 109% in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol ethoxylate		CO_2 production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
alkyl alcohol alkoxylate					No data available
sodium hydroxide					Not applicable (inorganic substance)
alkyl alcohol ethoxylate		CO_2 production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium cumenesulphonate	-1.1	Method not given	No bioaccumulation expected	
alkyl alcohol ethoxylate	No data available		Not relevant, does not bioaccumulate	
alkyl alcohol alkoxylate	No data available			
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
alkyl alcohol ethoxylate	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium cumenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				
alkyl alcohol alkoxylate	No data available				
sodium hydroxide	No data available				
alkyl alcohol ethoxylate	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
sodium cumenesulphonate	No data available				
alkyl alcohol ethoxylate	No data available				
alkyl alcohol alkoxylate	No data available				
sodium hydroxide	No data available				Mobile in soil
alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment

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: 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 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

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 1824

14.2 UN proper shipping name:

Sodium hydroxide solution

14.3 Transport hazard class(es):

Class: 8

Label(s): 8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: No

Marine pollutant: No

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: C5

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

EU regulations:
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 648/2004 - Detergents regulation

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

Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants	5 - 15 %
soap	< 5 %

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.

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

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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:
• H290 - May be corrosive to metals.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• H318 - Causes serious eye damage.
• H319 - Causes serious eye irritation.

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
• LD50 - Lethal Dose, 50% / Median Lethal dose
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• EC50 - effective concentration, 50%
• NOEL - No observed effect level
• NOAEL - No observed adverse effect level
• OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet