



## Divos 116 VM19

Revision: 2022-09-01

Version: 12.1

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

#### 1.1 Product identifier

**Trade name:** Divos 116 VM19

UFI: MYV3-X03D-5006-QDHP

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

**Product use:** Cleaning in place chemical.  
For industrial use only..

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

#### SWED - Sector-specific worker exposure description :

AISE\_SWED\_IS\_8b\_1

AISE\_SWED\_IS\_4\_1

#### 1.3 Details of the supplier of the safety data sheet

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

#### Contact details

Tandur Hf.  
Hesthálsi 12, 110 Reykjavík  
Tel. 5101200, Email: tandur@tandur.is

#### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible).

Poison Center: (+354) 543-2222

Emergency services: 112.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Skin Corr. 1A (H314)

STOT RE 2 (H373)

Eye Dam. 1 (H318)

Met. Corr. 1 (H290)

#### 2.2 Label elements



**Signal word:** Danger.

Contains tetrasodium ethylene diamine tetraacetate (Tetrasodium EDTA), sodium hydroxide (Sodium Hydroxide), potassium hydroxide (Potassium Hydroxide)

#### Hazard statements:

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

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

#### 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.

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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
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		3-10
potassium hydroxide	215-181-3	1310-58-3	01-2119487136-33	Skin Corr. 1A (H314) Acute Tox. 4 (H302) Met. Corr. 1 (H290)		1-3

#### Specific concentration limits

sodium hydroxide:

- Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

potassium hydroxide:

- Eye Dam. 1 (H318) >= 2% > Eye Irrit. 2 (H319) >= 1%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

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

ATE, if available, are listed in section 11.

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

#### Inhalation:

#### 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.

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**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.

**6.3 Methods and material for containment and cleaning up**

Dyke to collect large liquid spills. Use neutralising agent. 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. 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. 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)	Long term value(s)	Short term value(s)
sodium hydroxide		2 mg/m <sup>3</sup>
potassium hydroxide		2 mg/m <sup>3</sup>

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
sodium hydroxide	-	-	-	-
potassium hydroxide	-	-	-	-

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	-	-	-	-

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sodium hydroxide	2 %	-	-	-
potassium hydroxide	No data available	-	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	-	-	-	-
sodium hydroxide	2 %	-	-	-
potassium hydroxide	No data available	-	No data available	-

DNEL/DMEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

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
sodium hydroxide	-	-	1	-
potassium hydroxide	-	-	1	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

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	-
sodium hydroxide	-	-	1	-
potassium hydroxide	-	-	1	-

## 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
sodium hydroxide	-	-	-	-
potassium hydroxide	-	-	-	-

## Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-
sodium hydroxide	-	-	-	-
potassium hydroxide	-	-	-	-

## 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. 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.

## 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

## 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

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<b>Body protection:</b>	be chosen. No special requirements under normal use conditions. Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
<b>Respiratory protection:</b>	No special requirements under normal use conditions.
<b>Environmental exposure controls:</b>	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

<b>Appropriate engineering controls:</b>	No special requirements under normal use conditions.
<b>Appropriate organisational controls:</b>	No special requirements under normal use conditions.

**REACH use scenarios considered for the diluted product:**

	SWED	LCS	PROC	Duration (min)	ERC
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a

**Personal protective equipment**

<b>Eye / face protection:</b>	No special requirements under normal use conditions.
<b>Hand protection:</b>	No special requirements under normal use conditions.
<b>Body protection:</b>	No special requirements under normal use conditions.
<b>Respiratory protection:</b>	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

<b>Physical state:</b> Liquid	<b>Method / remark</b>
<b>Colour:</b> Clear , Pale , Yellow	
<b>Odour:</b> Product specific	
<b>Odour threshold:</b> Not applicable	
<b>Melting point/freezing point (°C):</b> Not determined	Not relevant to classification of this product
<b>Initial boiling point and boiling range (°C):</b> 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	
sodium hydroxide	> 990	Method not given	
potassium hydroxide	Not applicable to solids or gases	Method not given	

<b>Flammability (solid, gas):</b> Not applicable to liquids	<b>Method / remark</b>
<b>Flammability (liquid):</b> Not flammable.	
<b>Flash point (°C):</b> ≈ 100 °C	closed cup
<b>Sustained combustion:</b> The product does not sustain combustion ( UN Manual of Tests and Criteria, section 32, L.2 )	Weight of evidence
<b>Lower and upper explosion limit/flammability limit (%):</b> Not determined	

Substance data, flammability or explosive limits, if available:

<b>Autoignition temperature:</b> Not determined	<b>Method / remark</b>
<b>Decomposition temperature:</b> Not applicable.	
<b>pH:</b> >= 11.5 (neat)	ISO 4316
<b>Dilution pH:</b> > 11 (5 %)	ISO 4316
<b>Kinematic viscosity:</b> Not determined	
<b>Solubility in / Miscibility with water:</b> Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	500	Method not given	20
sodium hydroxide	1000	Method not given	20

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potassium hydroxide	No data available		
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Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Vapour pressure:** Not determined

**Method / remark**

See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
tetrasodium ethylene diamine tetraacetate	0.0000000002	Read across	25
sodium hydroxide	< 1330	Method not given	20
potassium hydroxide	Negligible	Method not given	

**Method / remark**

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

**Relative density:** ≈ 1.21 (20 °C)

**Relative vapour density:** No data available.

**Particle characteristics:** No data available.

**9.2 Other information****9.2.1 Information with regard to physical hazard classes**

**Explosive properties:** Not explosive. Vapours may form explosive mixtures with air.

**Oxidising properties:** Not oxidising.

**Corrosion to metals:** Corrosive

Weight of evidence

**9.2.2 Other safety characteristics**

**Alkali reserve:** ≈ 7.8 (g NaOH / 100g; pH=10)

**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. 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

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 <sub>50</sub>	1780	Rat	OECD 401 (EU B.1)		14000
sodium hydroxide		No data available				Not established
potassium hydroxide	LD <sub>50</sub>	333	Rat	OECD 425		13000

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## Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
tetrasodium ethylene diamine tetraacetate	LD <sub>50</sub>	> 5000	Rabbit	Method not given		Not established
sodium hydroxide	LD <sub>50</sub>	1350	Rabbit	Method not given		Not established
potassium hydroxide		No data available				Not established

## Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	LC <sub>50</sub>	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6
sodium hydroxide		No data available			
potassium hydroxide		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	12	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established
potassium hydroxide	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)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
potassium hydroxide	Corrosive	Rabbit	Draize test	

## Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	
sodium hydroxide	Corrosive	Rabbit	Method not given	
potassium hydroxide	Corrosive	Rabbit	Method not given	

## Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
sodium hydroxide	No data available			
potassium hydroxide	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	
sodium hydroxide	Not sensitising		Human repeated patch test	
potassium hydroxide	Not sensitising	Guinea pig	Method not given	

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
tetrasodium ethylene diamine tetraacetate	No data available			
sodium hydroxide	No data available			
potassium hydroxide	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
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)
potassium hydroxide	No evidence for mutagenicity, negative	Method not	No data available	

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	test results	given	
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## Carcinogenicity

Ingredient(s)	Effect
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
potassium hydroxide	No evidence for carcinogenicity, negative test results

## 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
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
potassium hydroxide			No data available				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				
sodium hydroxide		No data available				
potassium hydroxide		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				
sodium hydroxide		No data available				
potassium hydroxide		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				
sodium hydroxide		No data available				
potassium hydroxide		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					
sodium hydroxide			No data available					
potassium hydroxide			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	No data available
sodium hydroxide	No data available
potassium hydroxide	No data available

## STOT-repeated exposure

Ingredient(s)	Affected organ(s)
tetrasodium ethylene diamine tetraacetate	Respiratory tract
sodium hydroxide	No data available
potassium hydroxide	No data available

## Aspiration hazard



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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 <sub>50</sub>	> 100	<i>Lepomis macrochirus</i>	OPP 72-1, static (EPA)	96
sodium hydroxide	LC <sub>50</sub>	35	Various species	Method not given	96
potassium hydroxide	LC <sub>50</sub>	80	Various species	Weight of evidence	24

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC <sub>50</sub>	140	<i>Daphnia magna Straus</i>	DIN 38412, Part 11	48
sodium hydroxide	EC <sub>50</sub>	40.4	<i>Ceriodaphnia sp.</i>	Method not given	48
potassium hydroxide	EC <sub>50</sub>	30 - 1000	<i>Daphnia magna Straus</i>	Weight of evidence	

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
tetrasodium ethylene diamine tetraacetate	EC <sub>50</sub>	> 100	<i>Scenedesmus obliquus</i>	88/302/EEC, Part C, static	72
sodium hydroxide	EC <sub>50</sub>	22	<i>Photobacterium phosphoreum</i>	Method not given	0.25
potassium hydroxide		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
tetrasodium ethylene diamine tetraacetate		No data available			
sodium hydroxide		No data available			
potassium hydroxide		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 <sub>20</sub>	> 500	Activated sludge	OECD 209	0.5 hour(s)
sodium hydroxide		No data available			
potassium hydroxide	EC <sub>50</sub>	22	<i>Photobacterium phosphoreum</i>	Method not given	15 minute(s)

#### Aquatic long-term toxicity

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## 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)	
sodium hydroxide		No data available				
potassium hydroxide		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)	
sodium hydroxide		No data available				
potassium hydroxide		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
tetrasodium ethylene diamine tetraacetate		No data available				
sodium hydroxide		No data available				
potassium hydroxide		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 <sub>50</sub>	156	<i>Eisenia fetida</i>	OECD 207	14	
sodium hydroxide		No data available				
potassium hydroxide		No data available				

## 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	
sodium hydroxide		No data available				
potassium hydroxide		No data available				

## Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium hydroxide		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 hydroxide		No data available				
potassium hydroxide		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 hydroxide		No data available				
potassium hydroxide		No data available				

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**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			
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	
potassium hydroxide	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			
sodium hydroxide	No data available			
potassium hydroxide	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			
sodium hydroxide		No data available			
potassium hydroxide		No data available			

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable. Inherently biodegradable.
sodium hydroxide					Not applicable (inorganic substance)
potassium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available
sodium hydroxide					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT <sub>50</sub>	Method	Evaluation
tetrasodium ethylene diamine tetraacetate					No data available
sodium hydroxide					No data available
potassium hydroxide					No data available

**12.3 Bioaccumulative potential**

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
potassium hydroxide	No data available		Not relevant, does not bioaccumulate	

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	
sodium hydroxide	No data available				
potassium hydroxide	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K <sub>oc</sub>	Desorption coefficient Log K <sub>oc</sub> (des)	Method	Soil/sediment type	Evaluation
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected

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sodium hydroxide	No data available				Mobile in soil
potassium hydroxide	No data available				Low potential for adsorption to soil

**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 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.

**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

Sodium hydroxide solution

**14.3 Transport hazard class(es):**

**Transport hazard class (and subsidiary risks):** 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

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- substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605
- 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.

**Ingredients according to EC Detergents Regulation 648/2004**

EDTA and salts thereof	5 - 15 %
anionic surfactants, phosphonates, phosphates	< 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.

**Seveso - Classification:** Not classified

**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*

**SDS code:** MSDS1303

**Version:** 12.1

**Revision:** 2022-09-01

**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):, 4, 6, 7, 8, 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:**

- H290 - May be corrosive to metals.
- 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.

**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**