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Melitta Perfect Clean Tabs for Espresso Machines

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

#### 1.1 Product identifier

## **Melitta Perfect Clean Tabs for Espresso Machines**

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

Cleaner

## Uses advised against:

No information available at present.

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

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MELITTA Europa GmbH & Co. KG -Geschäftsbereich Haushaltsprodukte-Ringstraße 99 32427 Minden

Tel.: +49 (0)571 / 86 - 0 Fax: +49 (0)571 / 86 - 1560 Email: udo.vorfeld@wolf-pvg.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

### 1.4 Emergency telephone number

**Emergency information services / official advisory body:** 

---

## Telephone number of the company in case of emergencies:

+49 (0)571 / 86 - 0 (8.00h - 16.00h)

## **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class Hazard category Hazard statement

Eye Irrit. 2 H319-Causes serious eye irritation.

#### 2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



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H319-Causes serious eye irritation.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313-If eye irritation persists: Get medical advice / attention.

#### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## **SECTION 3: Composition/information on ingredients**

### 3.1 Substances

# n.a. **3.2 Mixtures**

Sodium carbonate	
Registration number (REACH)	01-2119485498-19-XXXX
Index	011-005-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	207-838-8
CAS	497-19-8
content %	20-40
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Eye Irrit. 2, H319
factors	

Disodium carbonate, compound with hydrogen peroxide (2:3)	
Registration number (REACH)	01-2119457268-30-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	239-707-6
CAS	15630-89-4
content %	10-<25
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Ox. Sol. 3, H272
factors	Acute Tox. 4, H302
	Eye Dam. 1, H318
Specific Concentration Limits and ATE	Eye Dam. 1, H318: >25 %
	Eye Irrit. 2, H319: >=7,5 %

Citric acid	
Registration number (REACH)	01-2119457026-42-XXXX
Index	607-750-00-3
EINECS, ELINCS, NLP, REACH-IT List-No.	201-069-1
CAS	77-92-9
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Eye Irrit. 2, H319
factors	STOT SE 3. H335

(1-hydroxyethylidene)bisphosphonic acid, sodium salt	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	249-559-4
CAS	29329-71-3
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-	Acute Tox. 4, H302
factors	Eye Irrit. 2, H319

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

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For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

#### Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

### Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

## 4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

On dust formation:

Irritation of the respiratory tract

Irritant to mucosa of the nose and throat

Coughing

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

# 4.3 Indication of any immediate medical attention and special treatment needed

n.c.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Adapt to the nature and extent of fire.

Water jet spray/foam/CO2/dry extinguisher

## Unsuitable extinguishing media

None known

## 5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of phosphorus

Toxic gases

#### 5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

## **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition.

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Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid build up of dust.

Avoid contact with eyes or skin. Contact with water - danger of sliding.

## 6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

## 6.2 Environmental precautions

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

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

Pick up mechanically and dispose of according to Section 13.

Flush residue using copious water.

#### 6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## **SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

## 7.1 Precautions for safe handling

#### 7.1.1 General recommendations

Avoid build up of dust.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

## 7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Protect against moisture and store closed.

Store at room temperature.

#### 7.3 Specific end use(s)

No information available at present.

## **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

© Chemical Name	general dust limit					Content %:
WEL-TWA: 10 mg/m3 (inhal. du	ust), 4 mg/m3	WEL-STEL:				
(respir. dust)						
Monitoring procedures:						
BMGV:				Other information:		

Sodium carbonate						
Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
Workers / employees	Human - inhalation	Long term, local effects	DNEL	10	mg/m3	

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Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	0,035	mg/l	
	Environment - marine		PNEC	0,035	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,035	mg/l	
	Environment - sewage treatment plant		PNEC	16,24	mg/l	
Consumer	Human - dermal	Short term, local effects	DNEL	6,4	mg/cm2	
Consumer	Human - dermal	Long term, local effects	DNEL	6,4	mg/cm2	
Workers / employees	Human - dermal	Short term, local effects	DNEL	12,8	mg/cm2	
Workers / employees	Human - dermal	Long term, local effects	DNEL	12,8	mg/cm2	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	5	mg/m3	

Citric acid						
Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	0,44	mg/l	
	Environment - marine		PNEC	0,044	mg/l	
	Environment - sewage		PNEC	1000	mg/l	
	treatment plant					
	Environment - sediment,		PNEC	34,6	mg/kg dw	
	freshwater			,		
	Environment - sediment,		PNEC	3,46	mg/kg dw	
	marine			,		
	Environment - soil		PNEC	33,1	mg/kg dw	
	Environment - sediment,		PNEC	7,52	mg/kg wet	
	freshwater			,	weight	
	Environment - sediment,		PNEC	0,752	mg/kg wet	
	marine			, -	weight	
	Environment - soil		PNEC	29,2	mg/kg wet	
				,	weight	

Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	0,136	mg/l	
	Environment - marine		PNEC	0,0136	mg/l	
	Environment - sediment, freshwater		PNEC	59	mg/kg	
	Environment - sediment, marine		PNEC	5,9	mg/kg	
	Environment - soil		PNEC	96	mg/kg	
	Environment - sewage treatment plant		PNEC	20	mg/l	
	Environment - oral (animal feed)		PNEC	12	mg/kg	
Consumer	Human - oral	Long term	DNEL	6,5	mg/kg bw/d	
Workers / employees	Human - oral	Long term	DNEL	13	mg/kg bw/d	

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Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note
	Environmental		r			
	compartment					
	Environment - freshwater		PNEC	11,09	mg/l	
	Environment - marine		PNEC	1,109	mg/l	
	Environment - water,		PNEC	17,66	mg/l	
	sporadic (intermittent)					
	release					
	Environment - sediment,		PNEC	40,2	mg/kg dry	
	freshwater				weight	
	Environment - sediment,		PNEC	4,02	mg/kg dry	
	marine				weight	
	Environment - soil		PNEC	1,54	mg/kg dry	
					weight	
	Environment - sewage treatment plant		PNEC	800	mg/l	
Consumer	Human - inhalation	Long term, systemic	DNEL	12	mg/m3	
		effects				
Consumer	Human - inhalation	Long term, local	DNEL	12	mg/m3	
		effects				
Workers / employees	Human - inhalation	Long term, systemic	DNEL	20	mg/m3	
		effects				
Workers / employees	Human - inhalation	Long term, local effects	DNEL	20	mg/m3	

- WEL-TWA = Workplace Exposure Limit Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
- (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit Short-term exposure limit (15-minute reference period).
- (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
- \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision. (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

### 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

## 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Normally not necessary.

With danger of contact with eyes.

Tight fitting protective goggles with side protection (EN 166).

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Skin protection - Hand protection:

Normally not necessary. With long-term contact:

Chemical resistant protective gloves (EN ISO 374).

If applicable

Protective gloves made of butyl (EN ISO 374).

Protective Neoprene® / polychloroprene gloves (EN ISO 374).

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

>= 0,4

Permeation time (penetration time) in minutes:

>= 480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Usual protective working garments

Respiratory protection:

Normally not necessary. If OES or MEL is exceeded.

If applicable, filter P2 (EN 143), code colour white

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

## 8.2.3 Environmental exposure controls

No information available at present.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state: Solid, Tabs
Colour: White
Odour: Odourless

Melting point/freezing point:

There is no information available on this parameter.

Boiling point or initial boiling point and boiling range:

There is no information available on this parameter.

Flammability: Flammable

Lower explosion limit:

Upper explosion limit:

Does not apply to solids.

Does not apply to solids.

Flash point: >100 °C

Auto-ignition temperature:

Decomposition temperature:

Decomposition

Decomposition

PH:

Decomposition

~10,4 (1 %, 20°C)

Kinematic viscosity:

Does not apply to solids.
Soluble:

Soluble

Partition coefficient n-octanol/water (log value):

Does not apply to mixtures.

Vapour pressure:

Density and/or relative density:

There is no information available on this parameter.

Relative vapour density:

Does not apply to solids.

## 9.2 Other information

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Explosives: There is no information available on this parameter. Oxidizing solids: No

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

The product has not been tested.

## 10.2 Chemical stability

Stable with proper storage and handling.

## 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

Protect from humidity.

### 10.5 Incompatible materials

Avoid contact with strong alkalis. Avoid contact with strong acids.

Reducing agent Alkali metals

## 10.6 Hazardous decomposition products

No decomposition when used as directed.

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Possibly more information on health effects, see Section 2.1 (classification)

Melitta Perfect Clean Tabs fo		lachines				
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal						n.d.a.
route:						
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye						n.d.a.
damage/irritation:						
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-						
RE):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Sodium carbonate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2800	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LD50	2,3	mg/l/2h	Rat	OECD 403 (Acute Inhalation Toxicity)	Based on available data, the classification criteria are not met.
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant

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Serious eye	Rabbit	OECD 405 (Acute	Irritant
damage/irritation:		Eye	
		Irritation/Corrosion)	
Respiratory or skin			Not sensitizising
sensitisation:			
Germ cell mutagenicity:		in vitro	Negative
Reproductive toxicity:			Negative
Symptoms:			diarrhoea,
			vomiting,
			mucous
			membrane
			irritation,
			nausea, lower
			abdominal pain

Disodium carbonate, compo	Disodium carbonate, compound with hydrogen peroxide (2:3)								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by oral route:	LD50	1034	mg/kg	Rat		References			
Acute toxicity, by dermal	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute				
route:					Dermal Toxicity)				
Skin corrosion/irritation:				Rabbit		Not irritant			
Serious eye				Rabbit	OECD 405 (Acute	Risk of serious			
damage/irritation:					Eye	damage to			
					Irritation/Corrosion)	eyes., Corrosive			
Respiratory or skin				Guinea pig	OECD 406 (Skin	Not sensitizising			
sensitisation:					Sensitisation)				
Specific target organ toxicity -	NOAEL	100	ppm	Rat	OECD 408 (Repeated				
repeated exposure (STOT-					Dose 90-Day Oral				
RE):					Toxicity Study in				
					Rodents)				
Symptoms:						mucous			
						membrane			
						irritation			

Citric acid						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5400	mg/kg	Rat	OECD 401 (Acute	
					Oral Toxicity)	
Acute toxicity, by oral route:	LD50	11700	mg/kg	Rat	OECD 401 (Acute	
					Oral Toxicity)	
Acute toxicity, by dermal	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
route:					Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye				Rabbit	OECD 405 (Acute	Eye Irrit. 2
damage/irritation:					Eye	
					Irritation/Corrosion)	
Respiratory or skin						No indications
sensitisation:						of such an
						effect.
Germ cell mutagenicity:				Rat	OECD 475	Negative
					(Mammalian Bone	
					Marrow Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation	
					Test)	
Carcinogenicity:						Negative
Reproductive toxicity:						Negative

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Symptoms:					vomiting, cornea opacity, coughing, stomach pain, mucous membrane irritation
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	4000	mg/kg	Rat	10 d
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	LOAEL	8000	mg/kg	Rat	10 d

(1-hydroxyethylidene)bisphosphonic acid, sodium salt								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	940	mg/kg	Rat				
Acute toxicity, by dermal	LD50	>7940	mg/kg	Rabbit				
route:								
Skin corrosion/irritation:						Not irritant		
Serious eye				Rabbit		Irritant		
damage/irritation:								
Respiratory or skin						Negative		
sensitisation:						_		
Germ cell mutagenicity:					in vitro	Negative		
Germ cell mutagenicity:					in vivo	Negative		
Carcinogenicity:	NOAEL	>384	mg/kg	Rat	OECD 453			
			bw/d		(Combined Chronic			
					Toxicity/Carcinogenicit			
					y Studies)			
Reproductive toxicity:	NOAEL	>=447	mg/kg	Rat				
			bw/d					
Specific target organ toxicity -	NOAEL	>=1724	mg/kg	Rat				
single exposure (STOT-SE):								

## 11.2. Information on other hazards

Melitta Perfect Clean Tabs for Espresso Machines									
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes			
Endocrine disrupting						Does not apply			
properties:						to mixtures.			
Other information:						No other			
						relevant			
						information			
						available on			
						adverse effects			
						on health.			

## **SECTION 12: Ecological information**

Possibly more information on environmental effects, see Section 2.1 (classification).

Melitta Perfect Clean Tabs for Espresso Machines									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:							n.d.a.		
12.1. Toxicity to							n.d.a.		
daphnia:									
12.1. Toxicity to algae:							n.d.a.		

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12.2. Persistence and	Inorganic
degradability:	products
	cannot be
	eliminated from
	water through
	biological
	purification
	methods.
12.3. Bioaccumulative	n.d.a.
potential:	
12.4. Mobility in soil:	n.d.a.
12.5. Results of PBT	n.d.a.
and vPvB assessment	
12.6. Endocrine	Does not apply
disrupting properties:	to mixtures.
12.7. Other adverse	No information
effects:	available on
	other adverse
	effects on the
	environment.
Other information:	According to
	the recipe,
	contains no
	AOX.

Sodium carbonate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	300	mg/l	Lepomis macrochirus		
12.1. Toxicity to daphnia:	EC50	48h	200 - 265	mg/l	Daphnia magna		
12.2. Persistence and degradability:							Not relevant for inorganic substances.
12.2. Persistence and degradability:							Product may hydrolyse.
12.3. Bioaccumulative potential:							Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Water solubility:			215	g/l			20°C

Disodium carbonate, o	Disodium carbonate, compound with hydrogen peroxide (2:3)									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes			
12.1. Toxicity to daphnia:	EC50	48h	4,9	mg/l	Daphnia magna					
12.1. Toxicity to algae:	ErC50	72h	2,62	mg/l	Skeletonema costatum					
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance			
12.1. Toxicity to fish:	LC50	96h	70,7	mg/l	Pimephales promelas					
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	2	mg/l	Daphnia pulex					
12.3. Bioaccumulative potential:							No bioaccumulation .			

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Toxicity to bacteria:	EC50	30min	466	mg/l	activated sludge	OECD 209 (Activated
						Sludge,
						Respiration
						Inhibition Test (Carbon and
						Ammonium
						Oxidation))

Citric acid			1				T
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.2. Persistence and		28d	100	%		OECD 301 E	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Modified OECD	
						Screening Test)	
12.1. Toxicity to fish:	LC50	96h	440-706	mg/l	Leuciscus idus	OECD 203	
						(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to	EC50	24h	1535	mg/l	Daphnia magna	OECD 202	
daphnia:						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC5		640	mg/l	Scenedesmus		
					quadricauda		
12.1. Toxicity to algae:	NOEC/NOEL	8d	425	mg/l	Scenedesmus		
					quadricauda		
12.2. Persistence and		28d	97	%		OECD 301 B	Readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Co2 Evolution	
						Test)	
12.3. Bioaccumulative	Log Pow		(-1,8) -				Bioaccumulation
potential:			(-0,2)				n is unlikely
							(LogPow < 1).
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substanc
Toxicity to bacteria:		16h	>10000	mg/l	Pseudomonas		
					putida		
Other information:	ThOD		750	mg/g			
Other information:	COD		728	mg/g			References
Other information:	BOD5		526	mg/l			References

(1-hydroxyethylidene)bisphosphonic acid, sodium salt							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to algae:	EC50	96h	>960	mg/l	Selenastrum capricornutum		
12.1. Toxicity to fish:	LC50	96h	368	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	527	mg/l	Daphnia magna		
12.2. Persistence and degradability:		28d	33	%		OECD 302 B (Inherent Biodegradability - Zahn- Wellens/EMPA Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		<2		Cyprinus caprio		

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12.5. Results of PBT and vPvB assessment					No PBT substance, No vPvB substance
Other information:	BOD	15,1	%		
Other information:	COD	66	%		

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

## For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

Uncontaminated packaging can be recycled.

15 01 02 plastic packaging

## **SECTION 14: Transport information**

#### **General statements**

14.1. UN number or ID number: n.a. Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):n.a.14.4. Packing group:n.a.Classification code:n.a.LQ:n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):n.a.14.4. Packing group:n.a.Marine Pollutant:n.a

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

n.a.

14.5. Environmental hazards: Not applicable

### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

### 14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

## **SECTION 15: Regulatory information**

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

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Observe restrictions:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC):

0 %

## REGULATION (EC) No 648/2004

15 % or over but less than 30 % oxygen-based bleaching agents 5 % or over but less than 15 % phosphonates

National rules/regulation for the compliance with maximum quantities with regard to phosphates and or phosphorous compounds must be observed and complied with.

## 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

### **SECTION 16: Other information**

Revised sections:

1-16

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

# Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H272 May intensify fire, oxidiser.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Eye Irrit. — Eye irritation

Ox. Sol. — Oxidising solid

Acute Tox. — Acute toxicity - oral

Eye Dam. — Serious eye damage

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

### Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

### Any abbreviations and acronyms used in this document:

acc., acc. to according, according to

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ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOX Adsorbable organic halogen compounds

approx. approximately Art., Art. no. Article number

ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level DNEL Derived No Effect Level

DOC Dissolved organic carbon

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC European Community

ECHA European Chemicals Agency

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ErCx, EµCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera

EU European Union

EVAL Ethylene-vinyl alcohol copolymer

Fax. Fax number gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

Koc Adsorption coefficient of organic carbon in the soil

Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer

IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

**IUCLIDInternational Uniform Chemical Information Database** 

IUPAC International Union for Pure Applied Chemistry

LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil

Log Kow, Log Pow Logarithm of octanol-water partition coefficient

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable n.av. not available n.c. not checked

n.d.a. no data available

NLP No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

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ppm parts per million PVC Polyvinylchloride

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

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