Revision nr 1 Dated 06/04/2023

Safety Data Sheet According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

SECTION 1. Ident	ification of the substance/mi	ixture and of the comp	any/undertaking
1.1. Product identif	ier		
Code:	Γ	TAB100] 484010678174	
Product name	V	Vpro _ Dishwasher tablets	
UFI :	Т	410-H0EH-U00D-8A4D	
1.2. Relevant identi	ified uses of the substance or mi	ixture and uses advised aរ	zainst
Intended use	ALL IN 1 DISHWASHER T	ABLETS	
1.3. Details of the s	upplier of the safety data sheet		
Name Full addross	E	3eko Italy Manufacturing Srl	
District and Country	V	/ia Varesina, 204	
District and Country	2	20156 Milario – Italy	
e-mail address of the	e competent person responsible fo	or the Safety Data Sheet	sds@dgsasrl.it
1.4. Emergency tele	phone number		
For urgent inquiries	refer to ENGLAND	), SCOTLAND (NHS 24) WALE	ES (NHS Direct Wales) - For medical advice contact 111
SECTION 2 Haras	ds identification		
2.1 Classification of	us identification		
The product is classi	fied as hazardous pursuant to the	provisions set forth in (EC) F	Regulation 1272/2008 (CLP) (and subsequent amendments and
supplements). The n	roduct thus requires a safety data	sheet that complies with the	e provisions of (EU) Regulation 2020/878.
Any additional inform	mation concerning the risks for he	alth and/or the environmen	t are given in sections 11 and 12 of this sheet.
Hazard classification	and indication:		5
Eye irritation, catego	iry 2	H319	Causes serious eye irritation.
2.2. Label elements	i		
Hazard labelling pur	suant to EC Regulation 1272/2008	(CLP) and subsequent amer	ndments and supplements.
Hazard pictograms:			
Signal words:	Warning		
Hazard statements:			
H319	Causes serious eye irritation.		
EUH208	Contains: Subtilisin. May produce	e an allergic reaction.	
Precautionary stater	nents:		
P101	If medical advice is needed, have	product container or label	at hand.
P102	Keep out of reach of children.		
P103	Read label before use.	-	
P204	IF IN EVES: Pipeo coutiously with	e. Water for coveral minutes	Pamova contact lances, if present and easy to do. Continue rincin
P305+P351+P356	If the irritation persists: Get med	lical advice / attention	temove contact lenses, if present and easy to do. Continue misin
Ingredients accordin	ig to Regulation (EC) No. 6/18/2004	and addree / accontion.	
Less than 5%	phosphates, phosph	onates, non-ionic surfactant	s, polycarboxylates.
5% or over but less t	han 15% oxygen-based bleach	ling agents.	
Enzymes (Amilase, P	rotease), perfumes.		
2.3. Other hazards			
On the basis of avail	able data, the product does not co	ontain any PBT or vPvB in pe	rcentage ≥ than 0,1%.
The product does no	ot contain substances with endocri	ne disrupting properties in	concentration $\geq$ 0.1%.
SECTION 3. Comm	osition/information on ingre	edients	
3.2. Mixtures			
Contains:			
Identification	x = Conc. %	Classification (EC) 1272	/2008 (CLP)
SODIUM CARBONA	TE		

INDEX 011-005-00-2	29 ≤ x < 39	Eye Irrit. 2 H319
EC 207-838-8		
CAS 497-19-8		
disodium carbonate-nydrogen perox	ide (2:3)	
INDEX -	$10 \le x \le 15$	Ox. Liq. 2 H272, Acute Tox. 4 H302, Eye Dam. 1 H318
EC 239-707-6		LD50 Oral: 893
CAS 15630-89-4		
2-propelleptanol, Ethosspropoxylate		
INDEX -	3≤x< 5	Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 605-450-7		
CAS 166736-08-9		
REACH Reg. 02-2119630747-33		
tetrasodium (1-hydroxyethane-1,1-d	iyl)bis(phosphor	nate)
INDEX -	1≤x< 3	Acute Tox. 4 H302, Eye Irrit. 2 H319
EC 223-267-7		STA Oral: 500 mg/kg
CAS 3794-83-0		
sodium silicate		
INDEX -	1 ≤ x < 3	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 215-687-4		
CAS 1344-09-8		
zinc sulfate heptahydrate		
INDEX 030-006-00-9	0,15 ≤ x < 0,2	Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 231-793-3		LD50 Oral: 1260
CAS 7446-20-0		
REACH Reg. 01-2119474684-27		
Subtilisin		
INDEX 647-012-00-8	0,15 ≤ x < 0,2	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1B H334, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
EC 232-752-2		LD50 Oral: 1728 mg/l/4h
CAS 9014-01-1		
REACH Reg. 01-2119480434-38		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

# **SECTION 4. First aid measures**

# 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again. INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

# **SECTION 5. Firefighting measures**

# 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

# 5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

# 5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

# **SECTION 6. Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures. **6.2. Environmental precautions** 

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

# 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

# **SECTION 7. Handling and storage**

# 7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):11

# 7.3. Specific end use(s)

See Subsection 1.2

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

#### 8.1. Control parameters

**Regulatory References:** 

ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii
		guvernului nr. 1.093/2006
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU)
		2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive
		91/322/FFC

#### **# SODIUM CARBONATE**

Threehold Limit Value

Theshold Little Value						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	ROU	1		3		

## # disodium carbonate-hydrogen peroxide (2:3)

	ate-nyurogen	peroxide (2.3	,							
Predicted no-effect cor	ncentration - PNI	EC								
Normal value in fresh	water				35		µg/L			
Normal value in marin	e water				35		µg/L			
Normal value for fresh	water sediment				NEA					
Normal value for marine water sediment					NEA					
Normal value for mari	ne water, interm	ittent release			35		µg/L			
Normal value of STP m	nicroorganisms				16,24		mg/l			
Normal value for the for	ood chain (secon	ndary poisoning)			NPI					
Normal value for the te	errestrial compa	rtment			NEA					
Normal value for the a	tmosphere				NPI					
Health - Derived no-eff	fect level - DNEL	/ DMEL								
			Effects on c	onsumers			Ef	fects on worker	S	
Route of exposure	Ac	cute local Acu	ute systemic	Chronic local	Chronic	Acute loc	al Acu	ite Chroni	c local	Chronic
					systemic		syste	emic		systemic
Inhalation			NPI		NPI		N	이 5 mg	/m3	NPI
Skin	6,4	1 mg/cm2	NPI	6,4 mg/cm2	NPI	12,8 mg/ci	m2 Ni	Pl 12,8 m	g/cm2	NPI
# sodium silicate										
Predicted no-effect cor	ncentration - PNI	EC								
Normal value in fresh	water			7,5			mg/l			
Normal value in marin	e water			1			mg/l			
Normal value for fresh	water sediment	:		NPI						
Normal value for mari	ne water sedime	nt		NPI						
Normal value for mari	ne water, interm	ittent release		7,5			mg/l			
Normal value of STP m	icroorganisms			348			mg/l			
Normal value for the for	ood chain (secon	ndary poisoning)		NEA						
Normal value for the te	errestrial compa	rtment		NPI						
Normal value for the a	tmosphere			NPI						
Health - Derived no-eff	fect level - DNEL	/ DMEL								
		Effects	s on consume	rs			Effec	ts on workers		
Route of exposure	Acute local	Acute systemic	Chronic loc	cal Chronic sy	/stemic	Acute local	Acute	Chronic local	Chro	nic systemic
				4			systemic			
Oral		NPI		800 µg/kg	g bw/d					
Inhalation	MED	NPI	MED	1,38 mg	g/m3	MED	NPI	MED	5,6	1 mg/m3
Skin	MED	NPI	MED	800 µg/kį	g bw/d	MED	NPI	MED	1,59	mg/kg bw/d

# # tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate)

Predicted no-effect	concentration -	· PNEC						
Normal value in free	sh water	96,3		µg/L				
Normal value in mai	rine water			9,63		µg/L		
Normal value for fre	esh water sedin	nent		193 mg/kg/d				
Normal value for ma	arine water sed	liment	19,3	9,3 mg/kg/d				
Normal value of STP	<sup>o</sup> microorganisr	ns	58	58 mg/l				
Normal value for the food chain (secondary poisoning)				5,3		mg/kg		
Normal value for the	e terrestrial cor	mpartment		14		mg/kg/d		
Normal value for the	e atmosphere			NPI				
Health - Derived no-	effect level - DI	NEL / DMEL						
		Effects	on consumers			Effe	cts on workers	
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute	Chronic local	Chronic systemic
						systemic		
Oral		NPI		2,4 mg/kg bw/d				
Inhalation	NPI	NPI	10 mg/m3	4,2 mg/m3	NPI	NPI	10 mg/m3	26,9 mg/m3
Skin	NPI	NPI	NPI	24 mg/kg bw/d	NPI	NPI	NPI	48 mg/kg bw/d
# Subtilisin								
Threshold Limit Valu	Je							
Туре	Country	/ TWA/8h		STEL/15min			Remarks / Ob	servations
		mg/m3	ppm	mg/m3	р	pm		
OEL	EU			30				
Predicted no-effect	concentration -	- PNEC						
Normal value in fres	sh water			1,7		µg/L		
Normal value in mai	rine water			170 ng/L				
Normal value for fre	esh water sedin	nent		NEA				
Normal value for ma	arine water sed	liment		NEA				
Normal value for wa	ater, intermitter	nt release		900		ng/L		
Normal value of STP	, microorganisr	ns		65		mg/l		
Normal value for the	e food chain (se	econdary poisoning)		NPI		-		
Normal value for the	e terrestrial cor	mpartment		568		µg/kg		
Normal value for the	e atmosphere			NPI				
Health - Derived no-	effect level - DI	NEL / DMEL						
Effects on consumers						F	ffects on workers	

		Effects o		Effects c	IT WOLKELS			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		17,28 mg/kg bw/d		2,86 mg/kg bw/d				
Inhalation	NPI	NPI	60 60 ng/m³	NPI	NPI	NPI	15 60 ng/m³	NPI
Skin	LOW	NPI	LOW	NPI	LOW	NPI	LOW	NPI

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

# 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

# HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions. SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with

# soap and water after removing protective clothing. EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties		
9.1. Information on basic physical and chemical propert	ties	
Properties	Value	Information
Appearance	solid	
Colour	Blue-white-green	
Odour	Lemon	
Melting point / freezing point	not available	
Initial boiling point	not applicable	

Flammability Lower explosive limit Upper explosive limit Flash point Auto-ignition temperature	not available not available not available not applicable not available 70 °C
Upper explosive limit	not available
Flash point	not applicable
Auto-ignition temperature	not available
Decomposition temperature	70 °C
рН	10,3-11,3
Kinematic viscosity	not available
Solubility	not available
Partition coefficient: n-octanol/water	not available
Vapour pressure	not available
Density and/or relative density	1 kg/l
Relative vapour density	not available
Particle characteristics	not available

Substance:disodium carbonate—hydrogen peroxide (2:3)

# 9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available
9.2.2. Other safety characteristics
Oxidising properties not available
Substance:disodium carbonate—hydrogen peroxide (2:3): Temperature: 50 °C

# **SECTION 10. Stability and reactivity**

**10.1. Reactivity** Information not available

10.2. Chemical stability

Information not available

**10.3. Possibility of hazardous reactions** The product may react violently with water.

The product may react violently with w

**10.4. Conditions to avoid** Avoid overheating. Prevent moisture or water from penetrating inside the containers.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

# **SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

	0
Metabolism, toxicokinetics, mechanism of action and c Information not available	other information
Information on likely routes of exposure Information not available	
Delayed and immediate effects as well as chronic effect Information not available	ts from short and long-term exposure
Interactive effects Information not available	
ACUTE TOXICITY ATE (Inhalation) of the mixture: ATE (Oral) of the mixture: ATE (Dermal) of the mixture:	Not classified (no significant component) >2000 mg/kg Not classified (no significant component)
# SODIUM CARBONATE LD50 (Dermal): LD50 (Oral): LC50 (Inhalation mists/powders):	117 mg/kg Mouse 4090 mg/kg Rat 2,3 mg/l/2h Rat
# disodium carbonate-hydrogen peroxide (2:3) LD50 (Dermal): LD50 (Oral):	2000 mg/kg Rabbit 893 mg/kg Rat
# 2-propelleptanol, Ethosspropoxylate LD50 (Oral):	> 2000 mg/kg Metodo: OECD 423
# sodium silicate LD50 (Dermal): LD50 (Oral):	5000 mg/kg Rat 3400 mg/kg Rat

	2,00 mg//40 Rat
# tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate) LD50 (Dermal): LD50 (Oral): STA (Oral):	5000 mg/kg (rabbit) 2850 mg/kg (Rat) 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
# Subtilisin LD50 (Dermal): LD50 (Oral): LC50 (Inhalation vapours):	2 mg/kg 1728 mg/kg 0,8 mg/l/4h
# zinc sulfate heptahydrate LD50 (Oral):	1260 mg/kg (rat)
<u>SKIN CORROSION / IRRITATION</u> Does not meet the classification criteria for this hazard clas	S
SERIOUS EYE DAMAGE / IRRITATION Causes serious eye irritation	
<u>RESPIRATORY OR SKIN SENSITISATION</u> May produce an allergic reaction. Contains: Subtilisin	
<u>GERM CELL MUTAGENICITY</u> Does not meet the classification criteria for this hazard clas	S
<u>CARCINOGENICITY</u> Does not meet the classification criteria for this hazard clas	S
<u>REPRODUCTIVE TOXICITY</u> Does not meet the classification criteria for this hazard clas	S
<u>STOT - SINGLE EXPOSURE</u> Does not meet the classification criteria for this hazard clas	S
<u>STOT - REPEATED EXPOSURE</u> Does not meet the classification criteria for this hazard clas	S
<u>ASPIRATION HAZARD</u> Does not meet the classification criteria for this hazard clas	S
<b>11.2. Information on other hazards</b> Based on the available data, the product does not contai disruptors with human health effects under evaluation.	n substances listed in the main European lists of potential or suspected endocrine
SECTION 12. Ecological information	
Use this product according to good working practices. Avoi contaminate soil or vegetation.	d littering. Inform the competent authorities, should the product reach waterways or
12.1. Toxicity	
# Subtilisin	
LC50 - for Fish	> 8,2 mg/l/96h
# 2-propelleptanol, Ethosspropoxylate	
LC50 - for Fish	> 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1
LC50 - for Fish EC50 - for Crustacea ECE0 - for Algae ( Aquatic Plants	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants	> 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1 > 10 mg/l/48h OECD - linea guida 202, parte 1 > 10 mg/l/72h OECD - linea guida 201 > 1 mg/l/72h OECD - linea guida 201
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-bydrogen peroxide (2:3)	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate EC50 - for Crustacea	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> <li>100 mg/l/48h</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate EC50 - for Crustacea EC50 - for Crustacea	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> <li>100 mg/l/48h</li> <li>35 mg/l/72h</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate EC50 - for Crustacea EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> <li>100 mg/l/48h</li> <li>35 mg/l/72h</li> <li>348 mg/l</li> </ul>
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LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate EC50 - for Crustacea EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish # tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate) EC50 - for Crustacea Chronic NOEC for Crustacea	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> <li>100 mg/l/48h</li> <li>35 mg/l/72h</li> <li>348 mg/l</li> <li>578 mg/l/48h</li> <li>6,75 mg/l</li> </ul>
LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants EC10 for Algae / Aquatic Plants # disodium carbonate-hydrogen peroxide (2:3) EC50 - for Crustacea Chronic NOEC for Crustacea # sodium silicate EC50 - for Crustacea EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish # tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate) EC50 - for Crustacea Chronic NOEC for Crustacea # zinc sulfate heptahydrate LC50 - for Eish	<ul> <li>&gt; 10 mg/l/96h OECD 203; ISO 7346; 92/69/CEE, C.1</li> <li>&gt; 10 mg/l/48h OECD - linea guida 202, parte 1</li> <li>&gt; 10 mg/l/72h OECD - linea guida 201</li> <li>&gt; 1 mg/l/72h OECD - linea guida 201</li> <li>4,9 mg/l/48h</li> <li>2 mg/l</li> <li>100 mg/l/48h</li> <li>35 mg/l/72h</li> <li>348 mg/l</li> <li>578 mg/l/48h</li> <li>6,75 mg/l</li> <li>0.8 mg/l/96h (Pimenbales prometas)</li> </ul>
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Solubility in water	125 g/l
Rapidly degradable	
# sodium silicate	
Solubility in water	115 mg/l
# tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate)	
Solubility in water	774 g/l
12.3. Bioaccumulative potential # Subtilizio	
$\pi$ subtrisin Partition coefficient: n-octanol/water	-13Log Kow
Tartition coefficient. IPoctanol/water	
<pre># tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate)</pre>	
Partition coefficient: n-octanol/water	-3 Log Kow
12.4. Mobility in soil	
<pre># tetrasodium (1-hydroxyethane-1,1-diyl)bis(phosphonate)</pre>	
Partition coefficient: soil/water	4,22 l/kg
12.5. Results of PBT and vPvB assessment	
On the basis of available data, the product does not contain	any PBT or vPvB in percentage ≥ than 0,1%.

# 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

## 12.7. Other adverse effects

Information not available

# **SECTION 13. Disposal considerations**

## 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

# CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

# **SECTION 14. Transport information**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

# 14.1. UN number or ID number

not applicable

#### 14.2. UN proper shipping name not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards not applicable

### 14.6. Special precautions for user not applicable

# 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

# **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006 Contained substance:

Point zinc sulfate heptahydrate REACH Reg.: 01-2119474684-27 75 Point 75

Subtilisin REACH Reg.: 01-2119480434-38-XXXX

Point 75 SODIUM CARBONATE

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012: None

Substances subject to the Rotterdam Convention: None

# Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017) WGK 2: Hazard to waters

# 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

# **SECTION 16. Other information**

This security data sheet was drawn up on the basis of the information contained in the SDS (Rev.1 of 24/03/2017) of the mixture supplier

Text of hazard (H) indica	ations mentioned in section 2-3 of the sheet:		
Ox. Liq. 2	Oxidising liquid, category 2		
Acute Tox. 4	Acute toxicity, category 4		
Eye Dam. 1	Serious eye damage, category 1		
Eye Irrit. 2	Eye irritation, category 2		
Skin Irrit. 2	Skin irritation, category 2		
STOT SE 3	Specific target organ toxicity - single exposure, category 3		
Resp. Sens. 1B	Respiratory sensitization, category 1B		
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1		
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1		
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2		
H272	May intensify fire; oxidiser.		
H302	Harmful if swallowed.		
H318	Causes serious eye damage.		
H319	Causes serious eye irritation.		
H315	Causes skin irritation.		
H335	May cause respiratory irritation.		
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.		
H400	Very toxic to aquatic life.		
H410	Very toxic to aquatic life with long lasting effects.		
H411	Toxic to aquatic life with long lasting effects.		

# LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

# GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament

- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website

- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

# Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11. Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

- EN Ingredient data sheet REGULATION (EC) No 648/2004
- IT Scheda degli ingredienti REGOLAMENTO (CE) N. 648/2004
- FR Fiche d'information sur les composants RÈGLEMENT (CE) No 648/2004
- DE Datenblatt über Inhaltsstoffe VERORDNUNG (EG) Nr. 648/2004
- ES Hoja informativa de ingredientes REGLAMENTO (CE) No 648/2004
- PL Arkusz danych składników ROZPORZĄDZENIE (WE) NR 648/2004
- PT Ficha de informação relativa aos ingredientes REGULAMENTO (CE) N.o 648/2004
- NL Gegevensblad betreffende bestanddelen VERORDENING (EG) Nr. 648/2004

SODIUM CARBONATE				
SODIUM CITRATE				
SODIUM CARBONATE PEROXIDE				
SODIUM POLYACRYLATE				
SODIUM CHLORIDE				
SODIUM SULFATE				
SODIUM SILICATE				
BENTONITE				
PEG-4000				
TAED				
PEG/PPG-5/2 PROPYLHEPTYL ETHER				
PENTASODIUM TRIPHOSPHATE				
TRISODIUM DICARBOXYMETHYL ALANINATE				
TETRASODIUM ETIDRONATE				
CETEARETH-25				
SUBTILISIN				
Sodium metasilicate pentahydrate				
Alpha Amylase				
Acrylic / Sulphonic Acid Copolymer				
Mono-/di-glycerides of a mixture of natural fatty acids				
ZINC SULFATE				
TALC				
Polysiloxane				
parfum				
ACID BLUE 74 ALUMINUM LAKE				
ACID BLUE 9 ALUMINUM LAKE				
ACID YELLOW 23 ALUMINUM LAKE				

# Emergency telephone numbers

For urgent safety information call the Anti-Poison Centre of your country:

	COUNTRY	CUSTOMER SERVICE NR.	ANTI-POISON CENTRE NR.
$\bigcirc$	AUSTRIA	(0043) 050 6700 2111	(0043) 01 406 43 43
$\bullet$	BELGIUM	(0032) 02 263 3333	(0032) 070 245 245
	BULGARIA	(00359) 0700 100 68	(00359) 2 9154 409
۲	CROATIA	(00385) 0130 40 333	(00385) 1 2348 342
	CZECK REP.	(00420) 840 111 313	(00420) 224 919 293 / +420 224 915 402
•	DENEMARK	(0045) 448 802 22	(0045) 8212 1212
$\bigcirc$	FINLAND	(09) 61336 235	(09) 471977
	FRANCE	(0033) 09 69 39 1234	(0033) 01 4542 5959
	GERMAN	(0049) 0711 93533655	(0049) 0551 19240
۲	GREECE	(0030) 210 994 6400	(0030) 210 779 3777
$\bigcirc$	HOLLAND	(0031) 076 5306400	(0031) 030 274 8888
$\bigcirc$	HUNGARY	(0036) 1 999 5000	(0036) 802 011 99
	IRELAND	(00353) 0844 815 8989	(00353) 1 809 2566 / (00353) 1 837 9964
•	ITALY	(0039) 02 20 30	Tel. (+39) 06.6859.3726- RomaTel. (+39) 06.4997.8000- RomaTel. (+39) 06.305.4343- RomaTel. (+39) 08.1545.3333- FoggiaTel. (+39) 081.545.3333- NapoliTel. (+39) 055.794.7819- FirenzeTel. (+39) 0382.24.444- PaviaTel. (+39) 02.66.1010.29- MilanoTel. 800.88.33.00- BergamoTel. 800.011.858- Verona
0	KAZAKISTAN	(007) 8 800 100 5731	(007) 3272 925 868
Ð	NORWAY	(0047) 227 82580	(0047) 225 913 00
$\bigcirc$	POLAND	(0048) 801 900 666	(0048) 124 119 999
<b>(</b>	PORTUGAL	(00351) 707 203 204	(00351) 808 250 143
$\bullet$	ROMANIAN	(0040) 0372 117 745	(0040) 213 183 606
-	RUSSIA	(007) 8 800 3333 887	(007) 343 229 9857 (007) 495 628 1687 (007) 921 757 3228
	SERBIA	(00381) 11 30 65 674	(00381) 11 3608 440
•	SLOVAKIA	(00421) 0850 003 007	(00421) 2 5477 4166
۲	SPAIN	(0034) 902 203 204	(0034) 91 562 0420
-	SWEDEN	(0046) 0771 751570	(0046) 010 456 6700; 112 (national callers)
•	SWISS	(0041) 0848 801 005	(0041) 44 251 51 51 (dial 145)
*	UK	(0044) 0844 815 8989	(0044) 844 892 0111
C	UK	(0044) 0844 815 8989	(0044) 844 892 0111
-	UCRAIN	(00380) 0 800 30 20 30	(00380) 44 258 4773