

# Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

### 1.1. Product identifier

Code: 488000860155 [NTB100] - 488000860156 [NTB200]  
Product name: ECOLABEL DISHWASHER TABS ALL IN 1  
UFI: 1P20-M0UP-C009-5FMJ

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

Intended use: Detergent tablets for dishwashers

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

Name: Beko Italy Manufacturing Srl  
Full address: Via Varesina, 204  
District and Country: 20156 Milano - Italy  
e-mail address of the competent person responsible for the Safety Data Sheet: sds@dgsasrl.it

### 1.4. Emergency telephone number

For urgent inquiries refer to: ENGLAND, SCOTLAND (NHS 24) WALES (NHS Direct Wales) - For medical advice contact 111

## SECTION 2. Hazards identification

### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation.

### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.  
EUH208 Contains: Subtilisin  
May produce an allergic reaction.

Precautionary statements:

P102 Keep out of reach of children.  
P101 If medical advice is needed, have product container or label at hand.  
P264 Wash hands thoroughly after handling.  
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.

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

Less than 5% Non-ionic surfactants, Polycarboxylates  
5% or over but less than 15% Oxygen-based bleaching agents

Enzymes

### 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>SODIUM CARBONATE</b>		
INDEX 011-005-00-2	20 ≤ x < 28	Eye Irrit. 2 H319
EC 207-838-8		
CAS 497-19-8		
<b>disodium carbonate—hydrogen peroxide (2:3)</b>		
INDEX -	12 ≤ x < 16	Ox. Sol. 3 H272, Acute Tox. 4 H302, Eye Dam. 1 H318
EC 239-707-6		Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 7,5%
CAS 15630-89-4		LD50 Oral: 893 mg/kg
REACH Reg. 01-2119457268-30		
<b>CITRIC ACID</b>		
INDEX 607-750-00-3	3 ≤ x < 6	Eye Irrit. 2 H319, STOT SE 3 H335
EC 201-069-1		
CAS 77-92-9		
REACH Reg. 01-2119457026-42		
<b>Cetylstearyl alcohol polyethoxylate 3 EO</b>		
INDEX -	1 ≤ x < 3	Eye Dam. 1 H318
EC -		
CAS 68439-49-6		
<b>sodium silicate</b>		
INDEX -	1 ≤ x < 2	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 215-687-4		
CAS 1344-09-8		
<b>Decan-1-ol, ethoxylated</b>		
INDEX -	0,2 ≤ x < 0,5	Acute Tox. 4 H302, Eye Dam. 1 H318
EC 500-046-6		LD50 Oral: 2000 mg/kg
CAS 26183-52-8		
<b>Disodium disilicate</b>		
INDEX -	0,1 ≤ x < 0,3	Eye Dam. 1 H318
EC 237-623-4		Eye Dam. 1 H318: ≥ 10%, Eye Irrit. 2 H319: ≥ 1%
CAS 13870-28-5		
<b>Subtilisin</b>		
INDEX 647-012-00-8	0,1 ≤ x < 0,2	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335,
EC 232-752-2		Resp. Sens. 1B H334, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
CAS 9014-01-1		LD50 Oral: 1728 mg/kg
REACH Reg. 01-2119480434-38		
<b>Amylase, α-</b>		
INDEX 647-015-00-4	0,01 ≤ x < 0,03	Resp. Sens. 1 H334
EC 232-565-6		
CAS 9000-90-2		

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:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
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/EEC.

### # SODIUM CARBONATE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	ROU	1		3		

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

#### Predicted no-effect concentration - PNEC

Normal value in fresh water	35	µg/L
Normal value in marine water	35	µg/L
Normal value for fresh water sediment	NEA	
Normal value for marine water sediment	NEA	
Normal value for marine water, intermittent release	35	µg/L
Normal value of STP microorganisms	16,24	mg/l
Normal value for the food chain (secondary poisoning)	NPI	
Normal value for the terrestrial compartment	NEA	
Normal value for the atmosphere	NPI	

#### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation		NPI		NPI		NPI	5 mg/m3	NPI
Skin	6,4 mg/cm2	NPI	6,4 mg/cm2	NPI	12,8 mg/cm2	NPI	12,8 mg/cm2	NPI

**# CITRIC ACID****Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
		mg/m3	ppm	
AGW	DEU	2	4 (C)	INHAL
Predicted no-effect concentration - PNEC				
Normal value in fresh water		NPI		
Normal value in marine water		NPI		
Normal value for fresh water sediment		NPI		
Normal value for marine water sediment		NPI		
Normal value for water, intermittent release		NPI		
Normal value for marine water, intermittent release		NPI		
Normal value for fresh water, intermittent release		NPI		
Normal value of STP microorganisms		NPI		
Normal value for the food chain (secondary poisoning)		NPI		
Normal value for the terrestrial compartment		NPI		
Normal value for the atmosphere		NPI		

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	LOW	NPI	NPI	NEA	LOW	NPI	NPI	NPI
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

**# sodium silicate**

Predicted no-effect concentration - PNEC				
Normal value in fresh water		7,5		mg/l
Normal value in marine water		1		mg/l
Normal value for fresh water sediment		NPI		
Normal value for marine water sediment		NPI		
Normal value for marine water, intermittent release		7,5		mg/l
Normal value of STP microorganisms		348		mg/l
Normal value for the food chain (secondary poisoning)		NEA		
Normal value for the terrestrial compartment		NPI		
Normal value for the atmosphere		NPI		

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		800 µg/kg bw/d				
Inhalation	MED	NPI	MED	1,38 mg/m3	MED	NPI	MED	5,61 mg/m3
Skin	MED	NPI	MED	800 µg/kg bw/d	MED	NPI	MED	1,59 mg/kg bw/d

**# Decan-1-ol, ethoxylated**

Predicted no-effect concentration - PNEC				
Normal value in fresh water		292		µg/L
Normal value in marine water		29,2		µg/L
Normal value for fresh water sediment		31,92		mg/kg/d
Normal value for marine water sediment		3,19		mg/kg/d
Normal value for marine water, intermittent release		3,9		µg/L
Normal value of STP microorganisms		1,4		mg/l
Normal value for the food chain (secondary poisoning)		NEA		
Normal value for the terrestrial compartment		1		mg/kg/d
Normal value for the atmosphere		NPI		

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		25 mg/kg bw/d				
Inhalation		NPI	NPI	87 mg/m3	VND	NPI	NPI	294 mg/m3
Skin	NPI	NPI		1250 mg/kg bw/d	NPI	NPI		2080 mg/kg bw/d

**# Disodium disilicate**

Predicted no-effect concentration - PNEC				
Normal value in fresh water		7,5		mg/l
Normal value in marine water		7,5		mg/l
Normal value for fresh water sediment		29,4		mg/kg/d
Normal value for marine water sediment		29,4		mg/kg/d
Normal value of STP microorganisms		28		mg/l
Normal value for the food chain (secondary poisoning)		106		mg/kg
Normal value for the terrestrial compartment		1,47		mg/kg/d

Normal value for the atmosphere

NPI

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		1,59 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	2,39 mg/m <sup>3</sup>	NPI	NPI	NEA	11,21 mg/m <sup>3</sup>
Skin	NPI	NPI	NPI	159 mg/kg bw/d	NPI	NPI	NPI	318 mg/kg bw/d

**# Subtilisin**

**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m <sup>3</sup>	ppm	ppm
OEL	EU		30	
Predicted no-effect concentration - PNEC				
Normal value in fresh water			1,7	µg/L
Normal value in marine water			170	ng/L
Normal value for fresh water sediment			NEA	
Normal value for marine water sediment			NEA	
Normal value for water, intermittent release			900	ng/L
Normal value of STP microorganisms			65	mg/l
Normal value for the food chain (secondary poisoning)			NPI	
Normal value for the terrestrial compartment			568	µg/kg
Normal value for the atmosphere			NPI	

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	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/m <sup>3</sup>	NPI	NPI	NPI	15 60 ng/m <sup>3</sup>	NPI
Skin	LOW	NPI	LOW	NPI	LOW	NPI	LOW	NPI

**# Amylase, α-**

Predicted no-effect concentration - PNEC				
Normal value in fresh water			5,2	µg/L
Normal value in marine water			520	ng/L
Normal value for fresh water sediment			NEA	
Normal value for marine water sediment			NEA	
Normal value for water, intermittent release			52	µg/L
Normal value of STP microorganisms			65	mg/l
Normal value for the food chain (secondary poisoning)			NEA	
Normal value for the terrestrial compartment			680	ng/L
Normal value for the atmosphere			NPI	

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	NPI	NPI	15 ng/m <sup>3</sup>	NPI	NPI	NPI	60 ng/m <sup>3</sup>	NPI
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	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 properties

Properties	Value	Information
Appearance	solid	
Colour	white	
Odour	characteristic	
Melting point / freezing point	0 °C	
Initial boiling point	not applicable	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not applicable	
Auto-ignition temperature	0 °C	
Decomposition temperature	not available	
pH	10 - 11	
Kinematic viscosity	not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,40	
Relative vapour density	not available	
Particle characteristics	not available	

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

## 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.

### 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

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

#### ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

# SODIUM CARBONATE

LD50 (Dermal):

117 mg/kg Mouse

LD50 (Oral):

4090 mg/kg Rat

LC50 (Inhalation mists/powders):

2,3 mg/l/2h Rat

# disodium carbonate—hydrogen peroxide (2:3)	
LD50 (Dermal):	2000 mg/kg Rabbit
LD50 (Oral):	893 mg/kg Rat
# CITRIC ACID	
LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	5400 mg/kg Rat
# sodium silicate	
LD50 (Dermal):	5000 mg/kg Rat
LD50 (Oral):	3400 mg/kg Rat
LC50 (Inhalation vapours):	2,06 mg/l/4h Rat
# Decan-1-ol, ethoxylated	
LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	2000 mg/kg
LC50 (Inhalation vapours):	1,6 mg/l
# Disodium disilicate	
LC50 (Inhalation vapours):	3,51 mg/l/4h
# Subtilisin	
LD50 (Dermal):	2 mg/kg
LD50 (Oral):	1728 mg/kg
LC50 (Inhalation vapours):	0,8 mg/l/4h
# Amylase, α-	
LD50 (Oral):	1911 mg/kg
LC50 (Inhalation vapours):	4,95 mg/l/4h

#### SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

#### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

#### RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains: Subtilisin

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### CARCINOGENICITY

Does not meet the classification criteria for this hazard class

#### REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

#### STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

#### STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### **11.2. Information on other hazards**

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

## **SECTION 12. Ecological information**

### **12.1. Toxicity**

#### # CITRIC ACID

LC50 - for Fish	100 mg/l/96h
EC50 - for Crustacea	50 mg/l/48h

#### # Subtilisin

LC50 - for Fish	> 8,2 mg/l/96h
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#### # disodium carbonate—hydrogen peroxide (2:3)

EC50 - for Crustacea	4,9 mg/l/48h
Chronic NOEC for Crustacea	2 mg/l

#### # sodium silicate

EC50 - for Crustacea	100 mg/l/48h
EC50 - for Algae / Aquatic Plants	35 mg/l/72h
Chronic NOEC for Fish	348 mg/l

#### # Decan-1-ol, ethoxylated

LC50 - for Fish	1,2 mg/l/96h
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EC10 for Algae / Aquatic Plants 3,23 mg/l/72h

# Disodium disilicate  
LC50 - for Fish 500 mg/l/96h  
EC50 - for Crustacea 491 mg/l/48h  
EC50 - for Algae / Aquatic Plants 44,1 mg/l/72h

# Amylase,  $\alpha$ -  
EC50 - for Algae / Aquatic Plants 5,2 mg/l/72h  
Chronic NOEC for Algae / Aquatic Plants 2,6 mg/l

### 12.2. Persistence and degradability

# SODIUM CARBONATE  
Solubility in water 1000 - 10000 mg/l  
Degradability: information not available

# CITRIC ACID  
Solubility in water 592 g/l @ 20 °C  
Rapidly degradable

# Subtilisin  
Solubility in water 125 g/l  
Rapidly degradable

# disodium carbonate—hydrogen peroxide (2:3)  
Solubility in water 140 g/l @ 20 °C

# sodium silicate  
Solubility in water 115 mg/l

# Decan-1-ol, ethoxylated  
Solubility in water 82  $\mu$ g/L @ 25 °C  
Rapidly degradable

# Disodium disilicate  
Solubility in water 700 g/L @ 20 °C

# Amylase,  $\alpha$ -  
Solubility in water 100 g/L @ 25 °C  
Rapidly degradable

### 12.3. Bioaccumulative potential

# CITRIC ACID  
Partition coefficient: n-octanol/water -1,6 Log Kow  
BCF 3,2

# Subtilisin  
Partition coefficient: n-octanol/water -1,3 Log Kow

# Decan-1-ol, ethoxylated  
Partition coefficient: n-octanol/water 31,5 Log Kow @ 25 °C

# Amylase,  $\alpha$ -  
Partition coefficient: n-octanol/water -1,3 @ 20 °C

### 12.4. Mobility in soil

Information not available

### 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  $\geq$  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	75	Subtilisin REACH Reg.: 01-2119480434-38
Point	75	CITRIC ACID REACH Reg.: 01-2119457026-42
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

### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

# CITRIC ACID

## SECTION 16. Other information

This Safety Data Sheet has been drawn up on the basis of the information contained in the SDS (Rev.1 of 06/26/2023) of the mixture Supplier

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Ox. Sol. 3	Oxidising solid, category 3
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. 1	Respiratory sensitization, category 1
Resp. Sens. 1B	Respiratory sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute 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.

**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.

Changes to previous review:

The following sections were modified:

02 / 03.



















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
CS	Datový list složek NAŘÍZENÍ EVROPSKÉHO PARLAMENTU A RADY (ES) č. 648/2004
EL	Δελτίο στοιχείων συστατικών ΚΑΝΟΝΙΣΜΟΣ (ΕΚ) αριθ. 648/2004
HU	Az összetevőket ismertető adatlap AZ EURÓPAI PARLAMENT ÉS A TANÁCS 648/2004
RO	Fișa tehnică privind elementele componente REGULAMENTUL (CE) NR. 648/2004
SK	Zoznam zložiek NARIADENIE EURÓPSKEHO PARLAMENTU A RADY (ES) č. 648/2004
SL	Seznam sestavin UREDBA (ES) št. 648/2004
FI	Luettelo ainesosista EUROOPAN PARLAMENTIN JA NEUVOSTON ASETUS (EY) N:o 648/2004
SV	Faktablad över beståndsdelar EUROPAPARLAMENTETS OCH RÅDETS FÖRORDNING (EG) nr 648/2004
HR	Popis sastojaka UREDBA (EZ) br. 648/2004

Sodium Carbonate
Sodium Citrate
Sodium Carbonate Peroxide
Sodium Sulfate
Citric Acid
Sodium Bicarbonate
Sodium Chloride
Tetraacetylenediamine
SODIUM POLYACRYLATE
Ceteareth-25
Acrylic / Sulphonic Acid Copolymer
Sodium Silicate
Polyethylenglicol
Sodium Gluconate
Deceth-6
Bentonite
Sodium Disilicate

<https://ec.europa.eu/growth/tools-databases/cosing>

## Emergency telephone numbers

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

	<b>COUNTRY</b>	<b>CUSTOMER SERVICE NR.</b>	<b>ANTI-POISON CENTRE NR.</b>
	AUSTRIA	(0043) 050 6700 2111	(0043) 01 406 43 43
	BELGIUM	(0032) 02 263 3333	(0032) 070 245 245
	BULGARIA	(00359) 0700 100 68	(00359) 2 9154 409
	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
	FINLAND	(09) 61336 235	(09) 471977
	FRANCE	(0033) 09 69 39 1234	(0033) 01 4542 5959
	GERMAN	(0049) 0711 93533655	(0049) 0551 19240
	GREECE	(0030) 210 994 6400	(0030) 210 779 3777
	HOLLAND	(0031) 076 5306400	(0031) 030 274 8888
	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 - Roma Tel. (+39) 06.4997.8000 - Roma Tel. (+39) 06.305.4343 - Roma Tel. 800.183.459 - Foggia Tel. (+39) 081.545.3333 - Napoli Tel. (+39) 055.794.7819 - Firenze Tel. (+39) 0382.24.444 - Pavia Tel. (+39) 02.66.1010.29 - Milano Tel. 800.88.33.00 - Bergamo Tel. 800.011.858 - Verona
	KAZAKISTAN	(007) 8 800 100 5731	(007) 3272 925 868
	NORWAY	(0047) 227 82580	(0047) 225 913 00
	POLAND	(0048) 801 900 666	(0048) 124 119 999
	PORTUGAL	(00351) 707 203 204	(00351) 808 250 143
	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
	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
	TURKEY	(0090) 444 5010	(0312) 433 70 01 or 800 314 7900
	UCRAIN	(00380) 0 800 30 20 30	(00380) 44 258 4773