

Safety Data Sheet

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

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

1.1. Product identifier

Code: LDS025] 488000971425 - [LDS026] 488000980233
 Product name: Laundry sheets
 UFI: W830-50PF-G00R-TUQ0
 EAN: 8054868510630

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

Intended use: Detergent in sheet form

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:

Acute toxicity, category 4	H302	Harmful if swallowed.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

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:

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains: Subtilisin, LINALOOL, α -hexylcinnamaldehyde. May produce an allergic reaction.

Precautionary statements:

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.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of the product / container in accordance with local regulations.

Ingredients (Regulation 648/2004)

< 30% Anionic surfactants. > 5% Non-ionic surfactants, Soap. Other ingredients: Enzymes, Perfumes.

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)
sodium dodecyl sulfate		
INDEX -	$32,5 \leq x < 35$	Flam. Sol. 1 H228, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412
EC 287-809-4		
CAS 151-21-3		ATE Oral: 500 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy		
INDEX -	$9 \leq x < 10,5$	Eye Dam. 1 H318
EC 605-233-7		
CAS 160875-66-1		

GLYCEROL		
INDEX -	$6 \leq x < 7$	
EC 200-289-5		
CAS 56-81-5		
Trisodium citrate		
INDEX -	$3 \leq x < 3,5$	
EC 200-675-3		
CAS 6132-04-3		
2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-		
INDEX 603-101-00-3	$0,2 \leq x < 0,25$	Eye Irrit. 2 H319
EC 405-040-6		
CAS 63500-71-0		
α-hexylcinnamaldehyde		
INDEX -	$0,2 \leq x < 0,25$	Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 202-983-3		
CAS 101-86-0		
2,6-dimethyloct-7-en-2-ol		
INDEX -	$0,2 \leq x < 0,25$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H336
EC 242-362-4		
CAS 18479-58-8		
REACH Reg. 01-2119457274-37		
LINALOOL		
INDEX 603-235-00-2	$0,2 \leq x < 0,25$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 201-134-4		
CAS 78-70-6		
Subtilisin		
INDEX 647-012-00-8	$0,1 \leq x < 0,15$	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/kg
CAS 9014-01-1		
REACH Reg. 01-2119480434-38		
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran		
INDEX 603-212-00-7	$0,05 \leq x < 0,1$	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 214-946-9		
CAS 1222-05-5		
REACH Reg. 01-2119488227-29		
d-limonene		
INDEX 601-096-00-2	$0 < x < 0,05$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 227-813-5		
CAS 5989-27-5		
vanillin		
INDEX -	$0 < x < 0,05$	Eye Irrit. 2 H319
EC 204-465-2		
CAS 121-33-5		
REACH Reg. 01-211951600-60		

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary, administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If symptoms occur, whether acute or delayed, consult a doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. 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 firefighting 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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during 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 the containers sealed, in a well-ventilated place, away from direct sunlight. Store in a cool and well-ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. 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:

CZE	Česká Republika	NAŘÍZENÍ VLÁDY ze dne 10. května 2021, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
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.

GLYCEROL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	10	2,61	15	3,915	
AGW	DEU	200		400		INHAL
MAK	DEU	200		400		INHAL
VLA	ESP	10				
VLEP	FRA	10				
NDS/NDSch	POL	10				
WEL	GBR	10				

Trisodium citrate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,44	mg/l
Normal value in marine water	0,044	mg/l
Normal value for fresh water sediment	34,6	mg/kg/d
Normal value for marine water sediment	3,46	mg/kg/d
Normal value of STP microorganisms	1000	mg/l
Normal value for the terrestrial compartment	33,1	mg/kg/d

2,6-dimethyloct-7-en-2-ol

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0278	mg/l
Normal value in marine water	0,00278	mg/l
Normal value for fresh water sediment	0,594	mg/kg
Normal value for marine water sediment	0,0594	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	111	mg/kg

Normal value for the terrestrial compartment				0,103	mg/kg			
Health - Derived no-effect level - DNEL / DMEL								
Effects on consumers				Effects on workers				
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	NPI		2,5 mg/kg bw/d					
Inhalation	NPI	NPI	NPI	4,35 mg/m3	NPI	NPI	NPI	24,7 mg/m3
Skin	LOW	LOW	NPI	2,5 mg/kg bw/d	LOW	NPI	LOW	7 mg/kg bw/d

2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-								
Predicted no-effect concentration - PNEC								
Normal value in fresh water		94			µg/L			
Normal value in marine water		9,4			µg/L			
Normal value for fresh water sediment		412			µg/L			
Normal value for marine water sediment		41,2			µg/L			
Normal value for marine water, intermittent release		940			µg/L			
Normal value of STP microorganisms		10			mg/l			
Normal value for the food chain (secondary poisoning)		NEA						
Normal value for the terrestrial compartment		90,2			µg/L			
Normal value for the atmosphere		NPI						
Health - Derived no-effect level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		7,5 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	13 mg/m3	NPI	NPI	NPI	44,1 mg/m3
Skin	NPI	NPI	NPI	25 mg/kg bw/d	NPI	NPI	NPI	41,7 mg/kg bw/d

Subtilisin								
Threshold Limit Value								
Type	Country	TWA/8h		STEL/15min	Remarks / Observations			
		mg/m3	ppm	mg/m3	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								
	Effects on consumers			Effects on workers				
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

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran								
Predicted no-effect concentration - PNEC								
Normal value in fresh water			6,8		µg/L			
Normal value in marine water			440		ng/L			
Normal value for fresh water sediment			2		mg/kg/d			
Normal value for marine water sediment			394		µg/L			
Normal value of STP microorganisms			1		mg/l			
Normal value for the food chain (secondary poisoning)			20,4		mg/kg			
Normal value for the terrestrial compartment			1,5		mg/kg/d			
Normal value for the atmosphere			NPI					
Health - Derived no-effect level - DNEL / DMEL								
		Effects on consumers			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		2,3 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	4 mg/m3	NPI	NPI	NPI	13,5 mg/m3
Skin	NPI	NPI	NPI	22 mg/kg bw/d	NPI	NPI	NPI	36,7 mg/kg bw/d

vanillin								
Predicted no-effect concentration - PNEC								
Normal value in fresh water				0,118	mg/l			
Normal value in marine water				0,0118	mg/l			
Normal value for fresh water sediment				58,22	mg/kg/d			
Normal value for marine water sediment				5,822	mg/kg/d			
Normal value of STP microorganisms				10	mg/l			
Normal value for the food chain (secondary poisoning)				NEA				
Normal value for the terrestrial compartment				11,54	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		NPI		
Inhalation	LOW	NPI	LOW	NPI	LOW	NPI	LOW	NPI
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

d-limonene

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	mg/m3	ppm
AGW	DEU	28	5	112
MAK	DEU	28	5	112
VLA	ESP	168	30	
MV	SVN	28	5	112

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,014	mg/l
Normal value for fresh water sediment	3,85	mg/kg
Normal value for marine water sediment	0,385	mg/kg
Normal value of STP microorganisms	1,8	mg/l
Normal value for the terrestrial compartment	0,763	mg/kg

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				4,8 mg/kg bw/d				
Inhalation				16,6 mg/m3				66,7 mg/m3
Skin				4,8 mg/kg bw/d				9,5 mg/kg bw/d

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 II 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 ISO 16321).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

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.

Product residues must not be indiscriminately disposed of with wastewater or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	solid	
Colour	white	
Odour	odourless	
Melting point / freezing point	not available	
Initial boiling point	not applicable	
Flammability	not flammable	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not applicable	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	
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

SECTION 10. Stability and reactivity**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Metabolism, toxicokinetic, 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:

1470,59 mg/kg

ATE (Dermal) of the mixture:

Not classified (no significant component)

sodium dodecyl sulfate

ATE (Oral):

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)

GLYCEROL

LD50 (Dermal):

56570 mg/kg Guinea pig

LD50 (Oral):

> 10000 mg/kg Rat

LC50 (Inhalation mists/powders):

> 5 mg/l

LINALOOL

LD50 (Dermal):

5610 mg/kg Rabbit

LD50 (Oral):

2790 mg/kg Rat

LC50 (Inhalation vapours):

> 3,2 mg/l/1h Mouse

2,6-dimethyloct-7-en-2-ol

LD50 (Dermal):

> 5000 mg/kg

LD50 (Oral):

> 3020 mg/kg

2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-

LD50 (Dermal):

2000 mg/kg

LD50 (Oral):

2000 mg/kg

Subtilisin

LD50 (Dermal):

2 mg/kg

LD50 (Oral):

1728 mg/kg

LC50 (Inhalation vapours):

0,8 mg/l/4h

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran

LD50 (Dermal):

3250 mg/kg

LD50 (Oral):

3000 mg/kg

LC50 (Inhalation vapours):

6,04 mg/l/4h

vanillin

LD50 (Dermal):

5010 mg/kg (Rabbit)

LD50 (Oral):

1580 mg/kg (Rat)

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

Subtilisin

LINALOOL

α -hexylcinnamaldehyde

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

This product is dangerous for the environment and the aquatic organisms. In the long term, it has negative effects on the aquatic environment.

12.1. Toxicity

d-limonene

LC50 - for Fish 35 mg/l/96h *Oncorhynchus mykiss*

EC50 - for Crustacea 69,6 mg/l/48h *Daphnia pulex*

GLYCEROL

LC50 - for Fish 11 mg/l/96h

EC50 - for Crustacea 2000 mg/l/48h

EC50 - for Algae / Aquatic Plants 2900 mg/l/72h

LINALOOL

LC50 - for Fish 27,8 mg/l/96h *Salmo gairdneri*

EC50 - for Crustacea 59 mg/l/48h *Daphnia magna*

sodium dodecyl sulfate

LC50 - for Fish 3,6 mg/l/96h

EC50 - for Crustacea 4,7 mg/l/48h

EC50 - for Algae / Aquatic Plants > 20 mg/l/72h

Chronic NOEC for Fish < 1,357 mg/l

Chronic NOEC for Crustacea < 0,508 mg/l

Chronic NOEC for Algae / Aquatic Plants > 0,6 mg/l

Subtilisin

LC50 - for Fish 15,6 mg/l/96h

EC50 - for Crustacea 0,327 mg/l/48h

Chronic NOEC for Crustacea 1,14 mg/l

2,6-dimethyloct-7-en-2-ol

LC50 - for Fish 27,8 mg/l/96h *Oncorhynchus mykiss*; OECD 203

EC50 - for Crustacea 38 mg/l/48h *Daphnia magna*; OECD 202

EC50 - for Algae / Aquatic Plants 65 mg/l/72h *Desmodesmus subcapitatus*; OECD 201

Chronic NOEC for Crustacea 9,5 mg/l *Daphnia magna*; OECD 211

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-

hexamethylindeno[5,6-c]pyran

LC50 - for Fish 0,95 mg/l/96h

EC50 - for Crustacea 0,194 mg/l/48h

EC50 - for Algae / Aquatic Plants 0,723 mg/l/72h

Chronic NOEC for Algae / Aquatic Plants 0,111 mg/l

2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-

EC50 - for Crustacea 320 mg/l/48h

EC50 - for Algae / Aquatic Plants 100 mg/l/72h

vanillin

LC50 - for Fish 116 mg/l/96h

EC50 - for Crustacea 36,79 mg/l/48h

EC50 - for Algae / Aquatic Plants 120 mg/l/72h

α -hexylcinnamaldehyde

LC50 - for Fish 1042 mg/l/96h

EC50 - for Algae / Aquatic Plants 8 mg/l/72h

EC10 for Algae / Aquatic Plants 59,27 mg/l/10d

12.2. Persistence and degradability

d-limonene

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

GLYCEROL

Solubility in water 1000000 mg/l

Rapidly degradable

LINALOOL

Solubility in water 10,11 mg/l

Rapidly degradable

sodium dodecyl sulfate

Solubility in water 130000 mg/l

Rapidly degradable

Subtilisin

Solubility in water 125 g/l

Rapidly degradable

2,6-dimethyloct-7-en-2-ol

Rapidly degradable

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran

NOT rapidly degradable

2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-

Entirely degradable
 vanillin
 Solubility in water 9 g/l @ 25 °C
 Rapidly degradable
 α-hexylcinnamaldehyde
 Rapidly degradable
 Trisodium citrate
 Rapidly degradable

12.3. Bioaccumulative potential

d-limonene
 Partition coefficient: n-octanol/water 4,38
 BCF 1022
 GLYCEROL
 Partition coefficient: n-octanol/water -1,75
 LINALOOL
 Partition coefficient: n-octanol/water 2,9
 Subtilisin
 Partition coefficient: n-octanol/water -1,3 Log Kow
 2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-
 Partition coefficient: n-octanol/water 1,65 Log Kow
 vanillin
 Partition coefficient: n-octanol/water 1,21 Log Kow
 α-hexylcinnamaldehyde
 Partition coefficient: n-octanol/water 5,3

12.4. Mobility in soil

2,6-dimethyloct-7-en-2-ol
 Partition coefficient soil/water: 2.25 l/kg
 LINALOOL
 Partition coefficient: soil/water 75

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.
 The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.
 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

Product

Point 40

Contained substance

Point 75 Subtilisin REACH Reg.: 01-2119480434-38

Point 75 LINALOOL

Point 75 2H-Pyran-4-ol, tetrahydro-4-methyl-2-(2-methylpropyl)-

Point 75 (2E)-3,7-dimethylocta-2,6-dien-1-ol REACH Reg.: 01-2119552430-49
Point 75 d-limonene

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 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 12/06/2025) of the mixture supplier

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

Flam. Liq. 3	Flammable liquid, category 3
Flam. Sol. 1	Flammable solid, category 1
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
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
Skin Sens. 1B	Skin 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
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
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.
H412	Harmful 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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- 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)
 23. Delegated Regulation (UE) 2023/707
 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
 25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
 26. Delegated Regulation (UE) 2024/197 (XXI 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
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	Fișă 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

AQUA
SODIUM LAURYL SULFATE [natrii laurilsulfas]
FATTY ALCOHOL ETHOXYLATE
GLYCERIN [glycerolum]
SODIUM CITRATE [natrii citras]
TETRAHYDRO-METHYL-METHYLPROPYL)-PYRAN-4-OL
HEXYL CINNAMAL
2,6-DIMETHYL-7-OCTEN-2-OL
LINALOOL
SUBTILISIN
HEXAMETHYLINDANOPYRAN
Limonene
VANILLIN

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

Emergency telephone numbers

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

	COUNTRY	CUSTOMER SERVICE NR.	ANTI-POISON CENTRE NR.
	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
	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
	TK	(0044) 0844 815 8989	(0044) 844 892 0111
	UCRAIN	(00380) 0 800 30 20 30	(00380) 44 258 4773