

	UNOX S.p.A.	Revision n. 1 Dated 27/06/2023 Printed on 27/06/2023 Page n. 1/16 First compilation	
	D&CAL SPRAY		

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:
Product name
UFI:

DB1090A0
D&CAL SPRAY
FM00-G0J4-3008-96CH

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

Intended use

Oven cleaner; detergent for cooking surfaces.

Identified Uses	Industrial	Professional	Consumer
Detergent for ovens and cooking surfaces.	-	ERC: 8a. PROC: 10, 11, 13, 8a. PC: 35. LCS: PW.	-

Uses Advised Against

Any use other than those identified.

1.3. Details of the supplier of the safety data sheet

Name
Full address
District and Country

Unox S.p.A.
Via Majorana, 22
35010 Cadoneghe (Padova)
Italia

tel. +39 049 86 57 511
fax +39 049 86 57 555

e-mail address of the competent person
responsible for the Safety Data Sheet

det.rinse@unox.com

1.4. Emergency telephone number

For urgent inquiries refer to

3E
Tel. (+)1-760-476-3961
Access code: 334577
24h/24h

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:

Skin corrosion, category 1C	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
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:

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Signal words: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Precautionary statements:

P260 Do not breathe mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P310 Immediately call a POISON CENTER.
P264 Wash hands thoroughly after handling.

Contains:

L-(+)-LACTIC ACID
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE
AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES
1-PROPANAMINIUM, 3-AMINO-N (CARBOXYMETHYL)-N,N-DIMETHYL-,N-(C8-18(EVEN NUMBERED) AND C18
UNSATURATED ACYL) DERIVS., HYDROXIDES, INNER SALTS

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

Less than 5%	Phosphonates, Amphoteric surfactants
5% or over but less than 15%	Non-ionic surfactants

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
L-(+)-LACTIC ACID		
INDEX 607-743-00-5	5 ≤ x < 10	Skin Corr. 1C H314, Eye Dam. 1 H318, Eye Dam. 1 H318, EUH071
EC 201-196-2		
CAS 79-33-4		
REACH Reg. 01-2119474164-39-XXXX		
AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES		
INDEX -	5 ≤ x < 10	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
EC 931-292-6		LD50 Oral: 1064 mg/kg

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CAS 308062-28-4
REACH Reg. 01-2119490061-47-XXXX
CITRIC ACID
INDEX - 5 ≤ x < 10 Eye Irrit. 2 H319, STOT SE 3 H335
EC 201-069-1
CAS 77-92-9
REACH Reg. 01-2119457026-42-XXXX
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE
INDEX - 1 ≤ x < 5 Eye Dam. 1 H318
EC 500-220-1
CAS 68515-73-1
REACH Reg. 01-2119488530-36-XXXX
1-PROPANAMINIUM, 3-AMINO-N (CARBOXYMETHYL)-N,N-DIMETHYL-,N-(C8-18(EVEN NUMBERED) AND C18 UNSATURATED ACYL) DERIVS., HYDROXIDES, INNER SALTS
INDEX - 1 ≤ x < 3 Eye Dam. 1 H318, Aquatic Chronic 3 H412
EC 931-333-8 Eye Dam. 1 H318: ≥ 10%, Eye Irrit. 2 H319: ≥ 1%
CAS 61789-40-0
REACH Reg. 01-2119489410-39-XXXX

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

See section 11.

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

Keep the safety data sheet of the preparation or, failing that, the label available for the medical personnel.

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

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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

Block the leakage if there is no hazard.
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 into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. 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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

Frequency of use: up to 5 days/week.
Duration of use: up to 16 minutes/day.
Internal use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)

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Normal value for fresh water sediment										34,6	mg/kg/d
Normal value for marine water sediment										3,46	mg/kg/d
Normal value for the terrestrial compartment										33,1	mg/kg
D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE											
Predicted no-effect concentration - PNEC											
Normal value in fresh water										0,1	mg/l
Normal value in marine water										0,01	mg/l
Normal value for fresh water sediment										0,487	mg/kg
Normal value for marine water sediment										0,048	mg/kg
Normal value for water, intermittent release										0,27	mg/l
Normal value of STP microorganisms										560	mg/l
Normal value for the terrestrial compartment										0,654	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			
Oral						37,5 mg/kg/d		VND			
Inhalation						VND		420 mg/m3			
Skin						VND		357000 mg/kg/d		VND 595000 mg/kg/d	
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Predicted no-effect concentration - PNEC											
Normal value in fresh water										0,0135	mg/l
Normal value in marine water										0,00135	mg/l
Normal value for fresh water sediment										1	mg/kg
Normal value for marine water sediment										0,1	mg/kg
Normal value of STP microorganisms										3000	mg/l
Normal value for the terrestrial compartment										0,8	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			
Oral								7,5 mg/kg bw/d			
Inhalation										44 mg/m3	
Skin								7,5 mg/kg bw/d		12,5 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											
The use of appropriate technical measures should always take priority over personal protection equipment. Provide a good level of general ventilation in the workplace (3 to 5 air changes per hour). The individual protection devices must bear the CE marking that certifies their compliance with the regulations in force.											



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Provide good general ventilation (ventilation obtained by opening doors and windows): 3-5 air / hour changes (dilution efficiency: 30%).

HAND PROTECTION
Use category III gloves (ref. standard EN 374). For definitive choice of gloves material consider: compatibility, degradation, breakthrough time and permeation. Work gloves wear time depends upon duration and type of wear. Suitable gloves (protection factor 6, permeation time > 480 minutes), material (thickness, mm): nitrile rubber (0,35 mm), butyl rubber (0,5 mm), polychloroprene (0,5 mm), polyvinylchloride (0,5 mm).

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 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask with a type A filter combined with a type P filter should be worn (see standard EN 14387).
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

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 waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	straw-coloured	
Odour	characteristic	
Odour threshold	not determined	
Melting point / freezing point	not determined	
Initial boiling point	100 °C	
Flammability	not applicable	
Lower explosive limit	not determined	
Upper explosive limit	not determined	
Flash point	> 100 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	400 °C	Substance:L-(+)-LACTIC ACID
pH	2,80-3,25	
Kinematic viscosity	not determined	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure	0,038 Pa	Substance:L-(+)-LACTIC ACID
Density and/or relative density	1,01-1,05	
Relative vapour density	not determined	
Particle characteristics	not applicable	

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Evaporation rate	not determined
Explosive properties	not determined
Oxidising properties	Not applicable

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

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

L-(+)-LACTIC ACID

Avoid exposure to: high temperatures. 200 °C.

10.5. Incompatible materials

L-(+)-LACTIC ACID

Avoid contact with: oxidising agents, strong bases.

10.6. Hazardous decomposition products

Heated to decomposition: carbon oxides, nitrogen oxides, phosphorus oxides.

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

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Metabolism, toxicokinetics, mechanism of action and other information
Information not available

Information on likely routes of exposure
Dermal, inhalation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
This product is corrosive and causes abrasions of skin surface, accompanied by rubefaction, warmth and sting. In the most serious cases, small vesicles appear, which cause strong sting and pain. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. The vapors and/or powders are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours. Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness. If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

Interactive effects
None known.

ACUTE TOXICITY

Corrosive to the respiratory tract.
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)

L-(+)-LACTIC ACID
LD50 (Dermal): > 2000 mg/kg rabbit
LD50 (Oral): 3543 mg/kg rat
LC50 (Inhalation vapours): 7,94 mg/l/4h rat

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL-, N-OXIDES
LD50 (Dermal): 2100 mg/kg rat or rabbit
LD50 (Oral): 1064 mg/kg rat

CITRIC ACID
LD50 (Dermal): > 2000 mg/kg ratto
LD50 (Oral): > 2000 mg/kg ratto

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE
LD50 (Dermal): > 2000 mg/kg OECD 402
LD50 (Oral): > 5000 mg/kg OECD 401

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LD50 (Oral): 2335 mg/kg rat

SKIN CORROSION / IRRITATION
Corrosive for the skin

SERIOUS EYE DAMAGE / IRRITATION
Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION
Does not meet the classification criteria for this hazard class

L-(+)-LACTIC ACID
Buhler test: negative (guinea pig, EPA OPP 81-6).

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class

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L-(+)-LACTIC ACID
Ames test: negative (OECD method 471).

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 have negative effects on aquatic environment.

12.1. Toxicity

L-(+)-LACTIC ACID

LC50 - for Fish	130 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	130 mg/l/48h Daphnia magna (metodo OECD 202).
EC50 - for Algae / Aquatic Plants	> 2800 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Fish	2,18 mg/l 90 d, Oreochromus mossambica
Chronic NOEC for Algae / Aquatic Plants	1900 mg/l Pseudokirchneriella subcapitata

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE

LC50 - for Fish	> 100 mg/l/96h Brachidanio rerio
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna (OECD 202)
EC50 - for Algae / Aquatic Plants	19,82 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Fish	1,8 mg/l Brachydanio rerio
Chronic NOEC for Crustacea	2 mg/l Scenedesmus subspicatus

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES

LC50 - for Fish	2,67 mg/l/96h Pimephales promelas
EC50 - for Crustacea	3,1 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,19 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Algae / Aquatic Plants	0,067 mg/l

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LC50 - for Fish	1,1 mg/l/96h
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EC50 - for Crustacea	1,9 mg/l/48h
EC50 - for Algae / Aquatic Plants	2,4 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	0,135 mg/l
CITRIC ACID	
LC50 - for Fish	440 mg/l/96h Leuciscus idus
EC50 - for Crustacea	120 mg/l/48h Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	425 mg/l prova statica

12.2. Persistence and degradability

L-(+)-LACTIC ACID
Rapidly degradable

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE
Rapidly degradable

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES
Rapidly degradable

1-PROPANAMINIUM, 3-AMINO-N (CARBOXYMETHYL)-N,N-DIMETHYL-,N-(C8-18(EVEN NUMBERED) AND C18 UNSATURATED ACYL) DERIVS., HYDROXIDES, INNER SALTS
Rapidly degradable

CITRIC ACID
Rapidly degradable

12.3. Bioaccumulative potential

L-(+)-LACTIC ACID
Irrelevant bioaccumulation.

L-(+)-LACTIC ACID
Partition coefficient: n-octanol/water -0,54

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE
Partition coefficient: n-octanol/water < 1,77
BCF < 100

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES
Partition coefficient: n-octanol/water 2,7

1-PROPANAMINIUM, 3-AMINO-N (CARBOXYMETHYL)-N,N-DIMETHYL-,N-(C8-18(EVEN NUMBERED) AND C18 UNSATURATED ACYL) DERIVS., HYDROXIDES, INNER SALTS
Partition coefficient: n-octanol/water 4,2

CITRIC ACID
Partition coefficient: n-octanol/water -1,72
BCF 0,01

12.4. Mobility in soil

L-(+)-LACTIC ACID
Partition coefficient: soil/water < 1,32

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

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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

None known.

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.
Waste transportation may be subject to ADR restrictions.

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

European Waste Code (intact product):
15 01 10* - packaging containing residues of or contaminated by hazardous substances
20 01 29* - detergents containing hazardous substances

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 3265

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (L-(+)-LACTIC ACID)
IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (L-(+)-LACTIC ACID)
IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (L-(+)-LACTIC ACID)

14.3. Transport hazard class(es)

ADR / RID:	Class: 8	Label: 8	
IMDG:	Class: 8	Label: 8	
IATA:	Class: 8	Label: 8	

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

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ADR / RID: NO			
IMDG: NO			
IATA: NO			
14.6. Special precautions for user			
ADR / RID: HIN - Kemler: 80 Limited Quantities: 5 L Tunnel restriction code: (E)			
Special provision: -			
IMDG: EMS: F-A, S-B Limited Quantities: 5 L			
IATA: Cargo: Maximum quantity: 60 L Packaging instructions: 856			
Passengers: Maximum quantity: 5 L Packaging instructions: 852			
Special provision: A3, A803			
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 3			
Contained substance			
Point 75			
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 ≥ 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:			

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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

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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 been performed for the following contained substances

L-(+)-LACTIC ACID

AMINES, C12-14 (EVEN NUMBERED)-ALKYLDIMETHYL, N-OXIDES

CITRIC ACID

D-GLUCOPYRANOSE, OLIGOMERIC, DECYL OCTYL GLYCOSIDE

1-PROPANAMINIUM, 3-AMINO-N (CARBOXYMETHYL)-N,N-DIMETHYL-,N-(C8-18(EVEN NUMBERED) AND C18 UNSATURATED ACYL) DERIVS., HYDROXIDES, INNER SALTS

This safety data sheet contains one or more Exposure Scenarios in an integrated form. Contents have been included in sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

SECTION 16. Other information

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

Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1C	Skin corrosion, category 1C
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

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Aquatic Acute 1 Hazardous to the aquatic environment, acute 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

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Use descriptor system:

ERC	8a	Widespread use of non- reactive processing aid (no inclusion into or onto article, indoor)
LCS	PW	Widespread use by professional workers
PC	35	Washing and cleaning products
PROC	10	Roller application or brushing
PROC	11	Non industrial spraying
PROC	13	Treatment of articles by dipping and pouring
PROC	8a	Transfer of substance or mixture (charging and discharging) at non- dedicated facilities

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

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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.