Safety Data Sheet

According to Annex II to REACH - Regulation 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: **lvtclala1209**
Product name **Classic washing machine**

UFI : **UV61-40VC-W00N-DGUR**

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

Intended use **Classic perfume washing machine detergent**

Identified Uses	Industrial	Professional	Consumer
Washing machine cleaner	-	-	✓
Uses Advised Against			
Any use other than those identified			

1.3. Details of the supplier of the safety data sheet

Name **MORONI AMATO SRL**
Full address **Via Prato della Corte 3**
District and Country **00065 Z.I. Fiano Romano (RM)**
Italia
Tel. +39 0765455945
Fax +39 0765455943
e-mail address of the competent person responsible for the Safety Data Sheet **alessandro.venditti@moronisrl.com**

1.4. Emergency telephone number

For urgent inquiries refer to **National Poisons Information Service, City Hospital, Birmingham B187QH, United Kingdom, Tel. +44 121 507 4123**

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:

SECTION 2. Hazards identification ... / >>

H319 Causes serious eye irritation.
EUH208 Contains: Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
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.
P280 Wear protective gloves / eye protection / face protection.
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% soap
5% or over but less than 15% anionic surfactants
perfumes, Alpha-Isomethyl Ionone
Preservation agents: Methylchloroisothiazolinone, Methylisothiazolinone, bronopol.

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

ALLCOLI C12-14, Ethoxylated, sulphate, sodium salts
For this substance, the supplier has established the following specific concentration limits:
Eye Dam.1 H318 for concentrations> 10%
Eye Dam.2 H319 for concentrations> = 5% and <10%
Reaction product of benzensolfonic acid, 4-C10-13-sec-alchil derivatives and sodium hydroxide
* Executed: Ionian mixture. See Regulation (EC) No. 1907/2006, Annex V, par. 3 and 4. This compound is present on the basis of the calculations and included for only danger classification purposes. The original ingredients contained in the Ionian mixture have been recorded, where required.

Contains:

Identification		**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
Alcohols c12-14 ethoxylated, sulphated, sodium salts			
INDEX		4,5 ≤ x < 5	**Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412**
EC	*500-234-8*		
CAS	*68891-38-3*		
REACH Reg.	*01-2119488639-160005*		
Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide			
INDEX		1,5 ≤ x < 2	**Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412**
EC	*932-051-8*		
CAS			
REACH Reg.	*		
2-BROMO-2-NITROPROPAN-1,3-DIOL			
INDEX	*603-085-00-8*	0 ≤ x < 0,05	**Acute Tox. 4 H302, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Acute 1 H400 M=10**
EC	*200-143-0*		**STA Oral: 500 mg/kg, STA Dermal: 1100 mg/kg**
CAS	*52-51-7*		

SECTION 3. Composition/information on ingredients ... / >>

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3: 1)

INDEX	*613-167-00-5*	0 ≤ x < 0,0015	**Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1C H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100**
EC	*611-341-5*		**Skin Corr. 1C H314: ≥ 0,6%, Skin Irrit. 2 H315: ≥ 0,06%, Skin Sens. 1A H317: ≥ 0,0015%, Eye Dam. 1 H318: ≥ 0,6%, Eye Irrit. 2 H319: ≥ 0,06%**
CAS	*55965-84-9*		**STA Oral: 100 mg/kg, STA Dermal: 50,001 mg/kg, STA Inhalation vapours: 0,501 mg/l, STA Inhalation mists/powders: 0,051 mg/l**

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: eliminate any contact lenses if it is easy to do so. Wash immediately and abundantly with water for at least 15/30 minutes, opening the eyelids well. Consult a doctor. SKIN: this is a product not classified as dangerous in contact with the skin, however in case of contact it is advisable to wash the contaminated parts with plenty of running water and neutral soap while removing any contaminated clothes and shoes. If the problem persists, consult a doctor. Wash the contaminated garments before reusing them. INGESTION: Call a physician or poison control center immediately. Induce vomiting only if directed by your doctor. Rinse the mouth with running water if the person is fully conscious and collaborative. Do not give anything to an unconscious or uncooperative person. Do not ingest anything that is not expressly authorized by your doctor. INHALATION: this is a product not classified as dangerous by inhalation, however in case of respiratory symptoms (cough, dyspnoea, breathing difficulties, asthma) keep the victim in a comfortable position that promotes breathing. If the problem persists, consult a doctor.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Not relevant

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

Acute effects: contact with the skin causes irritation with erythema, edema, dryness and cracking. Ingestion can cause health problems, which include abdominal pain with burning, nausea and vomiting.
The product causes serious eye damage and can cause corneal opacity, iris lesion, irreversible eye coloration.

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

Contact a doctor to keep the safety data sheet of the preparation or, in the absence thereof, the label.

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

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. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures between + 5 Â ° C and + 40 Â ° C away from heat sources, direct sunlight, open flames.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Alcohols c12-14 ethoxylated, sulphated, sodium salts

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	0,9168	mg/kg
Normal value for marine water sediment	0,0917	mg/kg
Normal value of STP microorganisms	10000	mg/l
Normal value for the terrestrial compartment	7,5	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			0,079 mg/cm2	15 mg/kg bw/d				
Inhalation				52 mg/m3				175 mg/m3
Skin				1650 mg/kg bw/d			0.132 mg/cm2	2750 mg/kg bw/d

SECTION 8. Exposure controls/personal protection ... / >>

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide		
Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,268	mg/l
Normal value in marine water	0,027	mg/l
Normal value for fresh water sediment	8,1	mg/kg
Normal value for marine water sediment	8,1	mg/kg
Normal value for water, intermittent release	0,055	mg/l
Normal value of STP microorganisms	5,6	mg/l
Normal value for the food chain (secondary poisoning)	NEA	
Normal value for the terrestrial compartment	35	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				0,425 mg/kg/d				
Inhalation				1,5 mg/m3				6 mg/m3
Skin				42,5 mg/kg/d				85 mg/kg/d

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
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.
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
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. 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.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.
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	dense liquid	
Colour	blue	
Odour	Floral	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	

SECTION 9. Physical and chemical properties ... / >>

Lower explosive limit	not available
Upper explosive limit	not available
Flash point	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
pH	8,5
Kinematic viscosity	not available
Solubility	soluble in water
Partition coefficient: n-octanol/water	not available
Vapour pressure	not available
Density and/or relative density	1,00
Relative vapour density	not available
Particle characteristics	not applicable

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

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

2-BROMO-2-NITROPROPAN-1,3-DIOL
Decomposes on contact with: water,metals,strong bases.

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.

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide
Avoid exposure to: sources of heat,light,UV rays,high temperatures.Avoid contact with: strong acids,oxidising agents.
2-BROMO-2-NITROPROPAN-1,3-DIOL
Avoid exposure to: light,UV rays,moisture.

10.5. Incompatible materials

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide
Avoid contact with: strong acids,oxidising agents.

10.6. Hazardous decomposition products

2-BROMO-2-NITROPROPAN-1,3-DIOL
May develop: nitric oxide,carbon oxides,hydrobromic acid.

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

SECTION 11. Toxicological information ... / >>

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:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

Alcohols c12-14 ethoxylated, sulphated, sodium salts

LD50 (Dermal):	> 2000 mg/kg Ratto
LD50 (Oral):	> 2000 mg/kg Ratto

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide

LD50 (Dermal):	> 2000 mg/kg ratto
LD50 (Oral):	> 2240 mg/kg Ratto

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

ALLCOLI C12-14, Ethoxylated, sulphate, sodium salts
It causes serious eye injuries (referring to concentrations> = 10%), on rabbit (Oecd Tg 405 method, supplier data)
Irritating (referring to concentrations> = 5% and <10%), on rabbit (Oecd Tg 405 method, supplier data)
Non -irritating (referring to concentrations <5%), on rabbit (Oecd Tg 405 method, supplier data)
Reaction product of benzensolfonic acid, 4-C10-13sec-alchil derivatives and sodium hydroxide
It causes serious eye injuries, on rabbit (Oecd Tg 405 method, literature data)

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.
Contains:
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3: 1)

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

SECTION 11. Toxicological information ... / >>

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

2-BROMO-2-NITROPROPAN-1,3-DIOL

LC50 - for Fish	20 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1,6 mg/l/48h Daphnia magna

Alcohols c12-14 ethoxylated, sulphated, sodium salts

LC50 - for Fish	> 5 mg/l/96h
EC50 - for Crustacea	5 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 50 mg/l/72h
Chronic NOEC for Fish	0,14 mg/l 28 giorni
Chronic NOEC for Crustacea	> 0,27 mg/l 21 giorni

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide

LC50 - for Fish	5,5 mg/l/96h
EC50 - for Crustacea	8,8 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 74 mg/l/72h
Chronic NOEC for Fish	0,23 mg/l Lepomis macrochirus (Pesce-sale Bluegill)
Chronic NOEC for Crustacea	0,27 mg/l Elimia
Chronic NOEC for Algae / Aquatic Plants	> 1,5 mg/l Elodea canadensis

12.2. Persistence and degradability

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3: 1)
Rapidly degradable

2-BROMO-2-NITROPROPAN-1,3-DIOL

Solubility in water	286000 mg/l

Rapidly degradable

Alcohols c12-14 ethoxylated, sulphated, sodium salts
Rapidly degradable

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide

Solubility in water	190000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

2-BROMO-2-NITROPROPAN-1,3-DIOL

Partition coefficient: n-octanol/water	0,22
BCF	3,16

Reaction product of benzenesulfonic acid, 4-C10-13-SEC-Alkyl derivatives and Sodium Hydroxide

Partition coefficient: n-octanol/water	0,7 Log Kow

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 ≥ than 0,1%.

SECTION 12. Ecological information ... / >>

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

The appropriate management of the waste of the mixture and/or its container must be determined in accordance with the provisions of Directive 2008/98/EC and SMI, with particular attention to the EU regulation 1357/2014 and the EU decision 955/2014. In particular, the methods of management of waste must be evaluated on a case -by -case basis, in relation to the composition of the refusal itself.

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

Regulation (EC) nr. 648/2004Regolamenti (EC) n. 648/2004 and 907/2006
The (s) surfactant (s) content (s) in this formulated is (are) compliant (s) to the biodegradability criteria established by Regulation (EC) n. 648/2004 and subsequent amendments relating to detergents.

Seveso Category - Directive 2012/18/EU: None

SECTION 15. Regulatory information ... / >>

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

Product

Point 3 - 40

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:
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.

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

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

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
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
Skin Sens. 1A	Skin sensitization, category 1A
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 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SECTION 16. Other information ... / >>

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 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.