

Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022 Revision nº 1 Rev. Date 11/04/2022

> Page 1 of 14

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

1.1. Product identifier

Code: Product name UFI:

TFR7127

START Powder LAUNDRY DETERGENT

NYJ1-E8KU-E00S-0EM6

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

Identified Uses Industrial Professional Consumer Powder detergent for manual and machine washing of cotton and polyester fabrics Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

NEW FADOR S.r.I. Name Full address via Mario Calderara, 31 District and Country 25018 Montichiari (BS) Italia

Tel. +39 030961 243

www.newfador.it

e-mail address of the competent person

responsible for the Safety Data Sheet info@newfador.it

1.4. Emergency telephone number

NEW FADOR S.r.I. For urgent inquiries refer to

+39 030961 243

(08.30 - 17.30)

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.

The classification of this mixture, with regard to the Irritation / Corrosion properties on eyes and skin, has been derived by applying the bridging principles (such as dilution, interpolation within a category of toxicity or substantially similar mixtures, with or without the www.aise.eu expert judgment) with reference to the provisions of Article 9 (3) and Article 9 (4) of Regulation (EC) No. 1272/2008. DetNet registration number 305.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation. Skin irritation, category 2 H315 Causes skin irritation.

2.2. Label elements

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



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

2 of 14

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.
H315 Causes skin irritation.

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 / protective clothing / eye protection / face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER / doctor / . . . / if you feel unwell.

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% phosphonates, anionic surfactants, non-ionic surfactants, soap

5% or over but less than oxygen-based bleaching agents, zeolites

15%

optical brighteners

perfumes

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

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification x = Conc. % Classification (EC) 1272/2008 (CLP)

SODIUM CARBONATE



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision nº 1

Rev. Date 11/04/2022

Page

3 of 14

CAS 497-19-8

 $20 \le x < 25$

Eye Irrit. 2 H319

EC 207-838-8

INDEX 011-005-00-2

REACH Reg. 01-2119485498-19

DISODIUM CARBONATE. **COMPOUND WITH HYDROGEN** PEROXIDE (2:3)

CAS 15630-89-4

 $5 \le x < 7$

Ox. Sol. 3 H272, Acute Tox. 4 H302, Eye Dam. 1 H318

LD50 Oral: 1034 mg/kg

EC 239-707-6

Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 7,5%

INDEX -REACH Reg. 01-2119457268-30

SILICIC ACID, SODIUM SALT

CAS 1344-09-8

 $3 \le x < 5$

Eye Dam. 1 H318, Skin Irrit, 2 H315.

STOT SE 3 H335

EC 215-687-4

INDEX -

REACH Reg. 01-2119448725-31 **BENZENESULFONIC ACID, C10-**

13-ALKYL DERIVS., SODIUM

SALTS

CAS 68411-30-3 $3 \le x < 5$ Acute Tox. 4 H302. Eye Dam. 1 H318,

Skin Irrit. 2 H315, Aquatic Chronic 3 H412

LD50 Oral: 1080 mg/kg

EC 270-115-0

INDEX -

REACH Reg. 01-2119489428-22

Alcohols, C12-15, branched and

linear, ethoxylated

CAS 106232-83-1 $1 \le x < 3$ Acute Tox. 4 H302,

Eye Dam. 1 H318, Aquatic Chronic 3 H412

LD50 Oral: >300 mg/kg

EC 500-294-5 INDEX -

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

SECTION 4. First aid measures

4.1. Description of first aid measures

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

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

4 of 14

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

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

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal 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

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.



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022
Revision n° 1
Rev. Date 11/04/2022
Page
5 of 14

SECTION 7. Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

SODIUM CARBONATE Health - Derived no-effe	ct level - DNEL / D Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			10 mg/m3				10 mg/m3	
DISODIUM CARBONATE		ITH HYDROGEN	PEROXIDE (2:	3)				
Normal value in fresh water				0,035	mg/l			
Normal value in marine water				0,035	mg/l			
Normal value for water, intern	nittent release			0,035	mg/l			
Normal value of STP microorg	ganisms			16,24	mg/l			
Health - Derived no-effec	Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				•		•	5 mg/m3	•
Skin	6,4 mg/cm2		6,4 mg/cm2		12,8 mg/cm2		12,8 mg/cm2	
BENZENESULFONIC AC	CID, C10-13-ALKY	L DERIVS., SODI	IUM SALTS					
Predicted no-effect concentra	tion - 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/l	kg		
Normal value for marine water sediment				6,8	mg/kg			
Normal value for water, intermittent release				0,017	mg/l			
Normal value of STP microorganisms				3,43	mg/l			



Conforms to Reg. (EU) 878/2020

Revision n° 1
Rev. Date 11/04/2022
Page

6 of 14

Normal value for the terrestrial compartment 35 mg/kg

Health - Derived no-ef	Effects on	OMEL			Effects on			
	consumers				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 bw/d				
Inhalation			1,5	1,5 mg/m3			6	6 mg/m3
Skin				42,5 mg/kg bw/d				85 mg/kg bw/d
SILICIC ACID, SODIUM	M SALT							
Predicted no-effect concen	tration - PNEC							
Normal value in fresh water	r			7.5	m	n/l		

Normal value of STP microorganisms					mg/l				
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				0,8 mg/kg bw/d					
Inhalation								5,61 mg/m3	
Skin				0,8 mg/kg bw/d				1,59 mg/kg bw/d	

ma/l

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

Normal value in marine water

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 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, 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.



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

7 of 14

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

White with blue specks

Appearance solid

Odour Floral fragrance
Odour threshold Not determined
Melting point / freezing point Not available

Initial boiling point Not available Flammability Not available Lower explosive limit Not available Upper explosive limit Not available Flash point Not available Auto-ignition temperature Not available рΗ 10.8 ± 0.5 Kinematic viscosity Not available

Solubility soluble in water
Partition coefficient: n-octanol/water Not applicable
Vapour pressure Not available

Density and/or relative density 0,900 +/- 0,050 g/cm3

Relative vapour density

Not available

Particle characteristics

Not applicable

9.2. Other information

Colour

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Explosive properties Not explosive

Oxidising properties No oxidizing properties

SECTION 10. Stability and reactivity

10.1. Reactivity

Information not available



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

8 of 14

10.2. Chemical stability

Information not available

10.3. Possibility of hazardous reactions

The product may react violently with water.

10.4. Conditions to avoid

Avoid overheating. Prevent moisture or water from penetrating inside the containers.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

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

ATE (Oral) of the mixture: >2000 mg/kg

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

SODIUM CARBONATE

LD50 (Dermal):> 2000 mg/kg bw rabbitLD50 (Oral):2800 mg/kg bw RatLC50 (Inhalation mists/powders):800 mg/l/2h guinea pig

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3)

 LD50 (Dermal):
 > 2000 mg/kg rabbit

 LD50 (Oral):
 1034 mg/kg rat

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

LD50 (Dermal): > 2000 mg/kg rat LD50 (Oral): 1080 mg/kg rat

SILICIC ACID, SODIUM SALT

 LD50 (Dermal):
 > 5000 mg/kg

 LD50 (Oral):
 3400 mg/kg

 LC50 (Inhalation mists/powders):
 2,06 mg/l/4h



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision nº 1

Rev. Date 11/04/2022

Page

9 of 14

Alcohols, C12-15, branched and linear, ethoxylated LD50 (Oral):

> 300 mg/kg

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

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

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE
Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

SILICIC ACID, SODIUM SALT

 LC50 - for Fish
 260 mg/l/96h

 EC50 - for Crustacea
 1700 mg/l/48h

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



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

10 of 14

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3)

 LC50 - for Fish
 70,7 mg/l/48h 48h

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

 Chronic NOEC for Crustacea
 2 mg/l

SODIUM CARBONATE

LC50 - for Fish 300 mg/l/96h Lepomis macrochirus

EC50 - for Crustacea 200 mg/l/48h
EC50 - for Algae / Aquatic Plants 10 mg/l
Chronic NOEC for Fish 560 mg/l 96h
Chronic NOEC for Algae / Aquatic Plants 1 mg/l

BENZENESULFONIC ACID, C10-13-ALKYL

DERIVS., SODIUM SALTS

LC50 - for Fish 1,67 mg/l/96h
EC50 - for Crustacea 2,9 mg/l/48h
EC50 - for Algae / Aquatic Plants 0,91 mg/l/72h
Chronic NOEC for Fish 0,23 mg/l 72d
Chronic NOEC for Crustacea 0,5 mg/l 7d
Chronic NOEC for Algae / Aquatic Plants 0,5 mg/l 96h

12.2. Persistence and degradability

DISODIUM CARBONATE, COMPOUND WITH HYDROGEN PEROXIDE (2:3) Degradability: information not available

SODIUM CARBONATE

Solubility in water 1000 - 10000 mg/l

Degradability: information not available

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS Rapidly degradable

12.3. Bioaccumulative potential

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., SODIUM SALTS

BCF 159

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%.

12.6. Endocrine disrupting properties



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page 11 of 14

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

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

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

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

CONTAMINATED PACKAGING

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

SECTION 14. Transport information

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

14.1. UN number or ID number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision n° 1

Rev. Date 11/04/2022

Page

12 of 14

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

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.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Ox. Sol. 3 Oxidising solid, category 3



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision nº 1

Rev. Date 11/04/2022

Page

13 of 14

Acute Tox. 4 Acute toxicity, category 4

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2 Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H272 May intensify fire; oxidiser. H302 Harmful if swallowed.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

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 (EÚ) 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)



Conforms to Reg. (EU) 878/2020

Issued on 11/04/2022

Revision nº 1

Rev. Date 11/04/2022

Page

14 of 14

- 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)
- 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.