

78/10

## **MATERIAL SAFETY DATA SHEET**

Conforms to Reg. (EU) 878/2020

**RLAB** 

DG

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n° Revision date Rev. n° Edited by Approved by

4

Filed by Page RLAB 1 di 11

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

1.1. Product identifier

Code: TERZI12

Product name AMACASA CURA LAVASTOVIGLIE

UFI: **84U5-9024-4005-T5TW** 

4.05.2022

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

Industrial Professional Consumer

Dishwasher cleaner

Leas Advised Against

Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

Name NEW FADOR S.r.I.
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

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

+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.

Hazard classification and indication:

Eye irritation, category 2 H319 Causes serious eye irritation.

#### 2.2. Label elements

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

Hazard pictograms:



Signal words: Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:



Conforms to Reg. (EU) 878/2020

Edited by

Board Code S-P4/2-2

Board Date 05/2010

Board Rev. 1

78/10 Revision date 4.05.2022

4 RLAB

Approved by DG

Filed by RLAB

Page 2 di 11

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.
P264 Wash hands thoroughly after handling.

**P280** Wear protective gloves / protective clothing / eye protection / face protection.

Rev. n°

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

insing.

P337+P313 If eye irritation persists: Get medical advice / attention.

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

Less than 5% non-ionic surfactants

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

15%

#### 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)	
lucillication	A = COIIC. /0		

CITRIC ACID MONOHYDRATE

CAS 5949-29-1  $15 \le x < 25$  Eye Irrit. 2 H319

EC 201-069-1 INDEX -

REACH Reg. 01-2119457026-42

SODIUM CARBONATE

CAS 497-19-8  $15 \le x < 25$  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  $5 \le x < 15$  Ox. Sol. 3 H272,

Acute Tox. 4 H302, Eye Dam. 1 H318

EC 239-707-6 Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 7,5%

INDEX - LD50 Oral: 1034

REACH Reg. 01-2119457268-30

ADIPIC ACID

CAS 124-04-9  $3 \le x < 7$  Eye Irrit. 2 H319

EC 204-673-3 INDEX 607-144-00-9

REACH Reg. 01-2119457561-38

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

#### **SECTION 4. First aid measures**



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

78/10 4.05.2022 4 RLAB DG RLAB 3 di 11

#### 4.1. Description of first aid measures

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

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

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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

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

Information not available

## **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

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

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

#### 5.2. Special hazards arising from the substance or mixture

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

### 5.3. Advice for firefighters

#### **GENERAL INFORMATION**

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

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal 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.



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
78/10	4.05.2022	4	RLAB	DG	RLAB	4 di 11

## **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**

Normal value for fresh water sediment

Normal value of STP microorganisms

Normal value for marine water sediment

Normal value for water, intermittent release

Normal value for the terrestrial compartment

8.1. Control parameters	5							
SODIUM CARBONATE								
Health - Derived no-effe	ect level - DNEL / D	MEL						
	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
nhalation			10 mg/m3				10 mg/m3	
CITRIC ACID MONOHY	DRATE							
Predicted no-effect concentrate	ation - PNEC							
Normal value in fresh water				0,44	mg	/I		
Normal value in marine wate	r			0,044	mg	/I		
Normal value for fresh water	sediment			34,6	mg	/kg		
Normal value for marine water	er sediment			3,46	mg	/kg		
Normal value of STP microo	rganisms			1000	mg	/I		
Normal value for the terrestri	al compartment			33,1	mg	/kg		
DISODIUM CARBONAT Predicted no-effect concentration		TH HYDROGEN	PEROXIDE (2:	3)				
Normal value in fresh water				0,035	mg	/I		
Normal value in marine wate	r			0,035	mg	/I		
Normal value for water, inter	mittent release			0,035	mg	/I		
Normal value of STP microo	rganisms			16,24	mg	/I		
Health - Derived no-effe	ect 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							5 mg/m3	7
Skin	6,4 mg/cm2		6,4 mg/cm2		12,8 mg/cm2		12,8 mg/cm2	
ADIPIC ACID								
Predicted no-effect concentra	ation - PNEC							
Normal value in fresh water				0,126	mg	/I		
Normal value in marine wate	r			0,013	mg	/I		

0,484

0,048

0,46

59,1

0,023

mg/kg

mg/kg

mg/l

mg/l

mg/kg



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n° Revision date Rev. n° Edited by Approved by Filed by Page 78/10 4.05.2022 4 RLAB DG RLAB 5 di 11

Health - Derived no-ef	fect level - DNEL / D	MEL						
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		19 mg/kg bw/d		19 mg/kg bw/d				
Inhalation		65 mg/m3		65 mg/m3	5 mg/m3	264 mg/m3	5 mg/m3	264 mg/m3
Skin		19 mg/kg bw/d		19 mg/kg bw/d		38 mg/kg bw/d		38 mg/kg bw/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

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### **EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

#### **ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## **SECTION 9. Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	solid	
Colour	white	
Odour	characteristic	
Melting point / freezing point	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	
Decomposition temperature	not available	
Self-accelerating decomposition temperature (SADT)	> 55 °C °C	
рН	8 ± 1	
Kinematic viscosity	not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	



78/10

# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Edited by

**RLAB** 

Approved by

DG

Board Code S-P4/2-2 Board Date 05/2010

6 di 11

Board Rev. 1

Filed by Page

**RLAB** 

Relative vapour density not available

Revision date

4.05.2022

9.2. Other information

Particle characteristics

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

not classified as explosive, Explosive properties

contains no explosive

Rev. n°

4

not available

substances according to CLP

Art. (14 (2))

Oxidising properties the product is not an oxidizing

substance

## **SECTION 10. Stability and reactivity**

#### 10.1. Reactivity

Information not available

#### 10.2. Chemical stability

Information not available

## 10.3. Possibility of hazardous reactions

The product may react violently with water.

#### 10.4. Conditions to avoid

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

## 10.5. Incompatible materials

Information not available

### 10.6. Hazardous decomposition products

Information not available

## **SECTION 11. Toxicological information**

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

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



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
78/10	4.05.2022	4	RLAB	DG	RLAB	7 di 11

**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 rabbit LD50 (Oral): 2800 mg/kg bw Rat LC50 (Inhalation mists/powders): 800 mg/l/2h guinea pig

CITRIC ACID MONOHYDRATE

 LD50 (Dermal):
 > 2000 mg/kg Rat

 LD50 (Oral):
 5400 mg/kg Mouse

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

LD50 (Dermal): > 2000 mg/kg rabbit LD50 (Oral): 1034 mg/kg rat

ADIPIC ACID

LD50 (Oral): 5560 mg/kg rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

**SERIOUS EYE DAMAGE / IRRITATION** 

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

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.



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

11211 1712011							
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page	
78/10	4.05.2022	4	RLAB	DG	RLAB	8 di 11	

ADIPIC ACID

LC50 - for Fish 230 mg/l/96h
EC50 - for Crustacea 46 mg/l/48h
EC50 - for Algae / Aquatic Plants 59 mg/l/72h
Chronic NOEC for Crustacea 6,3 mg/l 21d
Chronic NOEC for Algae / Aquatic Plants 41 mg/l 72h

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 Crustacea200 mg/l/48hEC50 - for Algae / Aquatic Plants10 mg/lChronic NOEC for Fish560 mg/l 96hChronic NOEC for Algae / Aquatic Plants1 mg/l

CITRIC ACID MONOHYDRATE

 LC50 - for Fish
 > 100 mg/l/96h

 EC50 - for Crustacea
 > 50 mg/l/48h

 Chronic NOEC for Algae / Aquatic Plants
 425 mg/l

### 12.2. Persistence and degradability

ADIPIC ACID
Rapidly degradable

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

CITRIC ACID MONOHYDRATE

Rapidly degradable

## 12.3. Bioaccumulative potential

ADIPIC ACID

BCF 3,162

CITRIC ACID MONOHYDRATE

BCF 3,2

12.4. Mobility in soil

ADIPIC ACID

Partition coefficient: soil/water 1,33

#### 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



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
78/10	4.05.2022	4	RLAB	DG	RLAB	9 di 11

disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

## **SECTION 13. Disposal considerations**

#### 13.1. Waste treatment methods

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

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

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

## **SECTION 14. Transport information**

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

#### 14.1. UN number or ID number

not applicable

#### 14.2. UN proper shipping name

not applicable

## 14.3. Transport hazard class(es)

not applicable

#### 14.4. Packing group

not applicable

## 14.5. Environmental hazards

not applicable

### 14.6. Special precautions for user

not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

## **SECTION 15. Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: None

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

### Contained substance

Point 75



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n° Revision date Rev. n° Edited by Approved by Filed by Page 78/10 4.05.2022 4 RLAB DG RLAB 10 di 11

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 1: Low 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

Acute Tox. 4

Eye Dam. 1

Serious eye damage, category 1

Eye Irrit. 2

H272

H272

H302

H318

Oxidising solid, category 3

Acute toxicity, category 4

Eye irritation, category 2

May intensify fire; oxidiser.

Harmful if swallowed.

H318

Causes serious eye damage.

H318 Causes serious eye damage.
Causes serious eye irritation.

#### 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%



Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2 Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page	
78/10	4.05.2022	4	RLAB	DG	RLAB	11 di 11	

- 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)
- 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)
- 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

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.