



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

1 of 13

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

### 1.1. Product identifier

Code: F\_102  
Product name: BLEACH  
Chemical name and synonym: SODIUM HYPOCHLORITE, SOLUTION 3,5% CL ACTIVE  
INDEX number: 017-011-00-1  
EC number: 231-668-3  
CAS number: 7681-52-9  
Registration Number: 01-2119488154-34  
UFI: MS80-JOUR-E00Y-4JWF

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

Identified Uses	Industrial	Professional	Consumer
Whitener and bleach	-	✓	✓

#### 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.l.  
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.l.  
+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:

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

2 of 13

Classification note  
according to Annex  
VI to the CLP  
Regulation: B

## 2.2. Label elements

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

Hazard pictograms:



Signal words:

Danger

Hazard statements:

**H290** May be corrosive to metals.  
**H314** Causes severe skin burns and eye damage.  
**H400** Very toxic to aquatic life.  
**H411** Toxic to aquatic life with long lasting effects.  
**EUH206** Warning! Do not use together with other products. May release dangerous gases (chlorine).

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+P330+P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
**P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P310** Immediately call a POISON CENTER.  
**P501** Dispose of contents / container in accordance with current regulations.

**Contains:** SODIUM HYPOCHLORITE, SOLUTION 3,5% CL ACTIVE

**INDEX** 017-011-00-1

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

Less than 5% chlorine-based bleaching agents

## 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

3 of 13

## 3.1. Substances

Contains:

Identification	Conc. %	Classification (EC) 1272/2008 (CLP)
<b>sodium hypochlorite, solution 15 % Cl active</b> CAS 7681-52-9	22 ≤ x < 24	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1, EUH031, Classification note according to Annex VI to the CLP Regulation: B
EC 231-668-3		
INDEX 017-011-00-1		
REACH Reg. 01-2119488154-34		

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

## 3.2. Mixtures

Information not relevant

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

Not specifically necessary. Observance of good industrial hygiene is recommended.

### 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.



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

4 of 13

## 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

Use breathing equipment if fumes or powders are released into the air. 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

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. 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.

### 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.

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

5 of 13

## sodium hypochlorite, solution 15% Cl active

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00021	mg/l
Normal value in marine water	0,000042	mg/l
Normal value for water, intermittent release	0,00026	mg/l
Normal value of STP microorganisms	4,69	mg/l
Normal value for the food chain (secondary poisoning)	11,1	mg/kg

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,26 mg/kg/d				
Inhalation	3,1 mg/m3	3,1 mg/m3	1,55 mg/m3	1,55 mg/m3	3,1 mg/m3	3,1 mg/m3	1,55 mg/m3	1,55 mg/m3

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 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 E 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.

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

## SECTION 9. Physical and chemical properties



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

6 of 13

## 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	straw yellow	
Odour	characteristic	Method: internal
Melting point / freezing point	0 °C	Method: internal Substance: WATER
Initial boiling point	100 °C	Method: internal Substance: WATER
Flammability	not available	Reason for missing data: The substance/mixture is not flammable
Lower explosive limit	not available	Reason for missing data: The substance/mixture is not explosive
Upper explosive limit	not available	Reason for missing data: The substance/mixture is not explosive
Flash point	not available	Reason for missing data: The substance/mixture is not flammable
Auto-ignition temperature	not available	Reason for missing data: not determined
Decomposition temperature	not available	Reason for missing data: not determined
pH	>11,5	Method: internal method
Kinematic viscosity	not available	Reason for missing data: not determined
Dynamic viscosity	2,8 mPa s	Method: Not specified Remark: referred to substance Sodium hydroxide (CAS 1310-73-2 EC 215-185-5) Temperature: 20 °C
Solubility	soluble in water	Method: derived from the nature of the individual raw materials component the mixture
Partition coefficient: n-octanol/water	-3,42	Method: non specificato Substance: sodium hypochlorite, solution 3,5 % Cl active
Vapour pressure	not available	
Density and/or relative density	1,05	Method: internal
Relative vapour density	not available	Reason for missing data: not determined
Particle characteristics		
Method:	It only applies to solids	
Size distribution		
Method:	It only applies to solids	
Dustiness		
Method:	It only applies to solids	
Specific surface area		
Method:	It only applies to solids	
Shape		
Method:	It only applies to solids	

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

Information not available



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

7 of 13

## 9.2.2. Other safety characteristics

Explosive properties	not classified as explosive, contains no explosive substances according to CLP Art. (14 (2))	Method: internal
Oxidising properties	la miscela non contiene sostanze ossidanti	Method: internal

## 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.

### 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

8 of 13

## 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)

sodium hypochlorite, solution 15% Cl active

LD50 (Dermal): > 10000 mg/kg rabbit  
LD50 (Oral): 1100 mg/kg rat  
LC50 (Inhalation vapours): > 10,5 mg/l/1h rat

## SKIN CORROSION / IRRITATION

Corrosive for the skin

Classification according to the experimental pH value

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

## 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





# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

9 of 13

human health effects under evaluation.

## SECTION 12. Ecological information

This product is dangerous for the environment and highly toxic for aquatic organisms.

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

### 12.1. Toxicity

sodium hypochlorite, solution 15% Cl active

LC50 - for Fish 0,059 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea 0,04 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 46 mg/l/72h Gracilaria tenuistipitata

### 12.2. Persistence and degradability

sodium hypochlorite, solution 15% Cl active

Solubility in water 1000 - 10000 mg/l

Degradability: information not available

### 12.3. Bioaccumulative potential

sodium hypochlorite, solution 15% Cl active

Partition coefficient: n-octanol/water -3,42

### 12.4. Mobility in soil

sodium hypochlorite, solution 15% Cl active

Partition coefficient: soil/water -2,9686

### 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  $\geq$  than 0,1%.

### 12.6. Endocrine disrupting properties

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

### 12.7. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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

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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

10 of 13

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.

## SECTION 14. Transport information

### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1791

### 14.2. UN proper shipping name

ADR / RID: HYPOCHLORITE SOLUTION

IMDG: HYPOCHLORITE SOLUTION

IATA: HYPOCHLORITE SOLUTION

### 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

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80

Limited  
Quantities: 5  
L

Tunnel  
restriction  
code: (E)

IMDG: Special provision: -

IMDG: EMS: F-A, S-B

Limited  
Quantities: 5  
L

IATA: Cargo:

Maximum  
quantity: 60 L

Packaging  
instructions:



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

11 of 13

Pass.:

Maximum  
quantity: 5 L

856  
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: 41

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  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

#### Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

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

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)



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

12 of 13

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:

<b>Met. Corr. 1</b>	Substance or mixture corrosive to metals, category 1
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H290</b>	May be corrosive to metals.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH031</b>	Contact with acids liberates toxic gas.
<b>EUH206</b>	Warning! Do not use together with other products. May release dangerous gases (chlorine).

### 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



# MATERIAL SAFETY DATA SHEET

Conforms to Reg. (EU) 878/2020

Issued on 26/02/2020

Revision n° 3

Rev. Date 28/03/2023

Page

13 of 13

- 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)
- 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.

## Changes to previous review:

The following sections were modified:

03 / 08 / 09 / 11 / 12 / 15.