

BI 21

Revision nr.2
Dated 29/12/2022
Printed on 30/12/2022
Page n. 1 / 12
Replaced revision:1 (Dated 10/07/2019)

ΕN

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:
 1705010009

 Product name
 BI 21

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

Intended use Traditional bio-plaster based on natural hydraulic lime

Identified Uses	Industrial	Professional	Consumer
BUILDING	-	SU: 19.	SU: 19.
		ERC: 10a, 11a.	ERC: 10a, 11a.
		PROC: 11, 19.	PROC: 19.
		AC: 4.	AC: 4.
		PC: 9b.	PC: 9b.

Product to be mixed with water for application on buildings.

Product for craft and private use. Any other use is not recommended.

1.3. Details of the supplier of the safety data sheet

Name FORNACI CALCE GRIGOLIN S.p. A.

Full address Via Foscarini, 2

District and Country 31040 Nervesa della Battaglia (TV)

italy

Tel. +39 0422 5261 Fax +39 0422 526299

e-mail address of the competent person responsible for the Safety Data Sheet info@fornacigrigolin.it

1.4. Emergency telephone number

For urgent inquiries refer to HEALTH EMERGENCY - 112

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:

Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms:



BI 21

Revision nr 2 Dated 29/12/2022 Printed on 30/12/2022 Page n. 2 / 12 Replaced revision:1 (Dated 10/07/2019)

SECTION 2. Hazards identification

Signal words: Danger

Hazard statements:

H318 Causes serious eye damage. H315 Causes skin irritation.

H335 May cause respiratory irritation. H317 May cause an allergic skin reaction.

Precautionary statements:

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

P102 Keep out of reach of children.

P261 Avoid breathing dust.

Wear protective gloves / face protection. P280

P302+P352 IF ON SKIN: Wash with plenty of of soap and water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Continue rinsing.

Immediately call a POISON CENTER / doctor / . . .

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Contains: WHITE CEMENT

NATURAL HYDRAULIC LIME NHL

HYDRATED LIME

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%.

The mixture has a low chromate content. After adding water the soluble chromium (VI) content is at most 2 ppm on the dry product.

To maintain a low chromate content, store it properly, in dry conditions, respecting the maximum expected storage terms.

The percentage of respirable crystalline silicon oxide is less than 1%. Therefore the product is not subject to identification. However it is advisable to use respiratory protection.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

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

NATURAL HYDRAULIC LIME NHL

INDEX $10 \le x < 20$ Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335

FC 285-561-1 CAS 85117-09-5

REACH Reg. 01-2119475523-36-XXXX

HYDRATED LIME

INDEX Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335 $2 \le x < 5$

215-137-3 EC CAS 1305-62-0

REACH Reg. 01-2119475151-45-0267

WHITE CEMENT

FC

INDEX Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1B H317 266-043-4

CAS 65997-15-1

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



Revision nr.2
Dated 29/12/2022
Printed on 30/12/2022
Page n. 3 / 12
Replaced revision:1 (Dated 10/07/2019)

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.

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. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

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

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



BI 21

Revision nr.2 EN
Dated 29/12/2022
Printed on 30/12/2022
Page n. 4 / 12
Replaced revision:1 (Dated 10/07/2019)

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 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

Regulatory References:

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS HRV Hrvatska Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na

radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)

GBR United Kingdom EH40/2005 Workplace exposure limits (Fourth Edition 2020)

EU OEL EU Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/183; Directive (EU) 2019/983;

Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC;

Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH ACGIH 2021

NATURAL HYDRAULIC LIME NHL										
Threshold Lin	nit Value									
Type	Country	TWA/8h		STEL/15	STEL/15min Remarks / Obs			servations		
		mg/m3	ppm	mg/m3	ppm					
OEL	EU	1		4		RESP				
Predicted no-	effect concentra	ation - PNEC	;							
Normal value in fresh water 0,574 mg/l										
Normal value in marine water 0,374 mg/l										
Normal value for fresh water sediment 1262,3 mg/kg										
Normal value for marine water, intermittent release 0,574 mg/l										
Normal value for fresh water, intermittent release 0,374 mg/l										
Normal valu	ie of STP microo	rganisms					3,511	mg/l		



BI 21

Revision nr.2 EN
Dated 29/12/2022
Printed on 30/12/2022
Page n. 5 / 12
Replaced revision:1 (Dated 10/07/2019)

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

					WHITE	CEMEN.	Γ				
Threshold Limit	Value										
Type	Country	TWA/8	3h		STEL/15n	nin	Rema	irks / Obse	ervations		
		mg/m3	3 рр	m	mg/m3	ppm					
TLV-ACGIH		1					RESP)			
Predicted no-eff	ect concentra	ation - Pi	NEC								
Normal value	in fresh water								NEA		
Normal value	in marine wate	er							NEA		
Normal value	for fresh water	r sedimer	nt						NEA		
Normal value	for marine wat	ter sedim	ent						NEA		
Normal value	for the terrestr	rial compa	artment						NEA		
Health - Derived	no-effect lev	el - DNEI	L / DMEL	_							
	Effe	cts on co	nsumers				Effects	on worker	s		
Route of expo	sure Acu	te local	Acute		Chronic local	Chronic	systemAicute lo	ocal	Acute	Chronic I	ocalChronic
			systemic						systemic		systemic
Oral							NEA		NEA	NEA	NEA
Inhalation							1			1	
							mg/m3			mg/m3	
Skin							NEA		NEA	NEA	NEA

				HYDRA	TED LIME			
Threshold Limit Va	alue							
Туре	Country	TWA/8ł	า	STEL/15n	nin	Remarks / Obs	ervations	
		mg/m3	ppm	mg/m3	ppm			
VLEP	FRA	5						
GVI/KGVI	HRV	5						
WEL	GBR	5						
OEL	EU	5						
TLV-ACGIH		5						
Predicted no-effec	t concentra	ation - PN	EC					
Normal value in fresh water							0,49	mg/l
Normal value in	marine wate	er					0,32	mg/l
Normal value for	water, inter	mittent re	lease				0,49	mg/l
Normal value of	STP microo	rganisms					3	mg/l
Normal value for	the terrestr	ial compa	rtment				1080	mg/kg/d
Health - Derived n	o-effect leve	el - DNEL	/ DMEL					
	cts on con	sumers			Effects on worker	rs		
Route of exposu	re Acut	te local A	Acute	Chronic local	Chronic syst	en Aic ute local	Acute	Chronic localChronic
		S	ystemic				systemic	systemic
Inhalation	4			1		4		1
	mg/r	m3		mg/m3		mg/m3		mg/m3

Legend

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no exposure expected; NPI = no hazard identified; LOW = low hazard; MED = medium hazard; HIGH = high hazard.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

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 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



BI 21

Revision nr.2 EN
Dated 29/12/2022
Printed on 30/12/2022
Page n. 6 / 12
Replaced revision:1 (Dated 10/07/2019)

Information

SECTION 8. Exposure controls/personal protection/>>

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

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 Appearance powder Colour beige Odour odourless Melting point / freezing point not available Initial boiling point not applicable Flammability not available Lower explosive limit not available Upper explosive limit not available Flash point not applicable Auto-ignition temperature not available Decomposition temperature not available 12 Kinematic viscosity not available Solubility not available Partition coefficient: n-octanol/water not available Vapour pressure not available Density and/or relative density 1,45 Relative vapour density not available Particle characteristics not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Granulometry 2 mm

SECTION 10. Stability and reactivity

10.1. Reactivity

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

WHITE CEMENT

When mixed with water, it hardens to form a stable mass.

HYDRATED LIME

Stable in normal conditions of use and storage.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

HYDRATED LIME

Stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The powders are potentially explosive when mixed with air.

NATURAL HYDRAULIC LIME NHL

It reacts exothermically with acids.



BI 21

Revision nr.2
Dated 29/12/2022
Printed on 30/12/2022
Page n. 7 / 12
Replaced revision:1 (Dated 10/07/2019)

SECTION 10. Stability and reactivity .../>>

HYDRATED LIME

Develops hydrogen on contact with: aluminium, brass, moisture.

Reacts with: carbon dioxide.

10.4. Conditions to avoid

Avoid environmental dust build-up.

NATURAL HYDRAULIC LIME NHL

Decomposes when exposed to air and moisture.

HYDRATED LIME

Decomposes if exposed to: moisture, moist air.

10.5. Incompatible materials

NATURAL HYDRAULIC LIME NHL

Aluminum and brass.

WHITE CEMENT

Incompatible with acids, ammonium salts, aluminum, alkaline metals and alkaline earth metals.

HYDRATED LIME

Avoid contact with: acids.

10.6. Hazardous decomposition products

NATURAL HYDRAULIC LIME NHL

Reacts with aluminum and brass, releasing hydrogen.

WHITE CEMENT

Develops hydrogen in contact with aluminum powder.

HYDRATED LIME

Develops hydrogen on contact with: aluminium, brass, moisture.

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:

ATE (Oral) of the mixture:

ATE (Oral) of the mixture:

ATE (Dermal) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

NATURAL HYDRAULIC LIME NHL

 $\begin{array}{lll} \mbox{LD50 (Dermal):} & > 2500 \mbox{ mg/kg rabbit} \\ \mbox{LD50 (Oral):} & > 2000 \mbox{ mg/kg rat} \\ \mbox{LC50 (Inhalation mists/powders):} & 6,04 \mbox{ mg/l/4h} \\ \end{array}$

HYDRATED LIME

LD50 (Dermal): > 2500 mg/kg LD50 (Oral): > 2000 mg/kg



ΕN Revision nr 2 Dated 29/12/2022 Printed on 30/12/2022 Page n. 8 / 12 Replaced revision:1 (Dated 10/07/2019)

SECTION 11. Toxicological information

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

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

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

NATURAL HYDRAULIC LIME NHL

LC50 - for Fish 50,6 mg/l/96h 49,1 mg/l/48h EC50 - for Crustacea EC50 - for Algae / Aquatic Plants 184,57 mg/l/72h EC10 for Algae / Aquatic Plants 48 mg/l/72h Chronic NOEC for Crustacea 32 mg/l

HYDRATED LIME

> 160 mg/l/96h LC50 - for Fish EC50 - for Crustacea > 49,1 mg/l/48h EC50 - for Algae / Aquatic Plants > 184,57 mg/l/72h 32 mg/l Chronic NOEC for Crustacea 48 mg/l

Chronic NOEC for Algae / Aquatic Plants

12.2. Persistence and degradability



Revision nr.2
Dated 29/12/2022
Printed on 30/12/2022
Page n. 9 / 12
Replaced revision:1 (Dated 10/07/2019)

SECTION 12. Ecological information .../>>

NATURAL HYDRAULIC LIME NHL

Solubility in water 1500 mg/l

HYDRATED LIME

Solubility in water 1844,9 mg/l

Degradability: information not available

12.3. Bioaccumulative potential

Information not available

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

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



BI 21

Revision nr.2 EN
Dated 29/12/2022
Printed on 30/12/2022
Page n. 10 / 12
Replaced revision:1 (Dated 10/07/2019)

SECTION 14. Transport information .../>>

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

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.

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:

Eye Dam. 1 Serious eye damage, category 1

Skin Irrit. 2 Skin irritation, category 2

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

Skin Sens. 1
Skin Sens. 1B
Skin sensitization, category 1
Skin sensitization, category 1B
H318
Causes serious eye damage.
H315
Causes skin irritation.

H335 May cause respiratory irritation.H317 May cause an allergic skin reaction.

Use descriptor system:

AC 4 Stone, plaster, cement, glass and ceramic articles
ERC 10a Widespread use of articles with low release (outdoor)

ΕN

FORNACI CALCE GRIGOLIN S.p. A.



BI 21

Revision nr 2 Dated 29/12/2022 Printed on 30/12/2022 Page n. 11 / 12 Replaced revision:1 (Dated 10/07/2019)

SECTION 16. Other information

ERC 11a Widespread use of articles with low release (indoor)

PC Fillers, putties, plasters, modelling clay

PROC 11 Non industrial spraying

PROC 19 Manual activities involving hand contact

Building and construction work SU

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



Revision nr.2 EN
Dated 29/12/2022
Printed on 30/12/2022
Page n. 12 / 12
Replaced revision:1 (Dated 10/07/2019)

SECTION 16. Other information .../>>

- 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:

02/03/04/06/08/09/11/12/15/16.