

## FORNACI CALCE GRIGOLIN S.p. A.

 Revision nr.3
 EN

 Dated 27/12/2024
 Printed on 27/12/2024

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 Replaced revision:2 (Dated 15/12/2022)

# **MGK 40**

	Safety Data Sheet		
	According to Annex II to REACH - Regulation (EU) 2020	D/878	
SECTION 1. Identification of	the substance/mixture and of the co	ompany/undertaking	
1.1. Product identifier			
Code:	1704010174		
Product name	MGK 40		
JFI :	UFR0-4059-P00V-8CRV		
1.2. Relevant identified uses of the substa	nce or mixture and uses advised against		
Intended use	Hydrophobic mortar for masonry class M5		
	Industrial Professional	Consumer	
	Industrial Professional SU: 19.	Consumer SU: 19.	
BUILDING Product to be mixed with water for applicat	- SU: 19.		
BUILDING Product to be mixed with water for applicat Product for craft and private use.	- SU: 19.		
BUILDING Product to be mixed with water for applicat Product for craft and private use. Any other use is not recommended.	- SU: 19. tion on buildings.		
BUILDING Product to be mixed with water for applicat Product for craft and private use. Any other use is not recommended. 1.3. Details of the supplier of the safety da	- SU: 19. tion on buildings. ta sheet FORNACI CALCE GRIGOLIN S.p. A.		
BUILDING Product to be mixed with water for applicat Product for craft and private use. Any other use is not recommended. 1.3. Details of the supplier of the safety dat Name Full address	- SU: 19. tion on buildings. ta sheet FORNACI CALCE GRIGOLIN S.p. A. Via Foscarini, 2	SU: 19.	
BUILDING Product to be mixed with water for applicat Product for craft and private use. Any other use is not recommended. 1.3. Details of the supplier of the safety dat Name Full address	- SU: 19. tion on buildings. ta sheet FORNACI CALCE GRIGOLIN S.p. A.		
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Identified Uses BUILDING Product to be mixed with water for applicat Product for craft and private use. Any other use is not recommended. 1.3. Details of the supplier of the safety dat Name Full address District and Country	- SU: 19. tion on buildings. ta sheet FORNACI CALCE GRIGOLIN S.p. A. Via Foscarini, 2 31040 Nervesa della Battaglia Italy Tel. +39 0422 5261 Fax +39 0422 526299	SU: 19.	
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### 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.

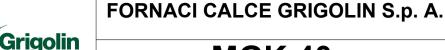
Hazard classification and indication:		
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1B	H317	May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

#### 2.2. Label elements

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

#### Hazard pictograms:





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## 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:	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P261	Avoid breathing dust.
P280	Wear protective gloves / face protection.
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.
P310	Immediately call a POISON CENTER / doctor /
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
Contains:	PORTLAND CEMENT CLINKER
	HYDRATED LIME

#### 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  $\geq 0.1\%$ .

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)
PORTLAND CE	EMENT CLINKER	5≤x< 9	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1B H317
EC	266-043-4 65997-15-1		
	02-2119682167-31-	0000	
INDEX EC CAS	215-137-3 1305-62-0 01-2119475151-45-	1≤x< 3 0267	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid. EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes,



#### SECTION 4. First aid measures

opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If symptoms occur, whether acute or delayed, consult a doctor.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

## 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



## Grigolin evoluzioni costruttive

#### SECTION 6. Accidental release measures ..../>

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.

## **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

Degulatory references

Regulatory reference	es:	
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
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) 2019/130; 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 2023

PORTLAND CEMENT CLINKER							
Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV-ACGIH		1				RESP	



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

				HYDRATED LIN	ΛE		
Threshold Limit Va	alue						
Туре	Country	TWA/8h		STEL/15mii	า	Remarks / Observa	tions
		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 concentr	ation - PNEC					
Normal value in	fresh water					0,49	mg/l
Normal value in	marine wat	er				0,32	mg/l
Normal value for	water, inte	rmittent release				0,49	mg/l
Normal value of	STP microo	organisms				3	mg/l
Normal value for	the terrest	rial compartment				1080	mg/kg/d
Health - Derived no	o-effect lev	el - DNEL / DME	L				
	Effe	ects on consumers	6		Effects	on workers	
Route of exposu	re Acu	ite local Acute	Ch	ronic local Chroni	c systen <b>Aic</b> ute lo	ocal Acute	Chronic localChronic

Route of exposure	Acute local	Acute	Chronic local	Chronic systen <b>Aic</b> ute local	Acute	Chronic localChronic
		systemic			systemic	systemic
Inhalation	4		1	4		1
	mg/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 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. The above values are not TLVs, but guide values, to be used for particles that do not have their own TLV and that are insoluble or poorly soluble in water and have low toxicity.

#### 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

Wear airtight protective goggles (see standard EN ISO 16321).

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

Value powder grey odourless not available not applicable not available Information





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

#### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Granulometry

< 3 mm

SECTION 10. Stability and reactivity
10.1. Reactivity
There are no particular risks of reaction with other substances in normal conditions of use.
PORTLAND CEMENT CLINKER When mixed with water, it hardens to form a stable mass.
HYDRATED LIME Stable in normal conditions of use and storage. <b>10.2. Chemical stability</b>
The product is stable in normal conditions of use and storage.
PORTLAND CEMENT CLINKER The compound is stable in the conditions of use and storage, if kept dry. When wet, it can react with acids, ammonium salts, aluminum and other non-noble metals.
HYDRATED LIME Stable in normal conditions of use and storage. <b>10.3. Possibility of hazardous reactions</b>
The powders are potentially explosive when mixed with air.
HYDRATED LIME Develops hydrogen on contact with: aluminium,brass,moisture. Reacts with: carbon dioxide. <b>10.4. Conditions to avoid</b>
Avoid environmental dust build-up.
PORTLAND CEMENT CLINKER Moisture can cause lumps and quality loss.
HYDRATED LIME Decomposes if exposed to: moisture,moist air. <b>10.5. Incompatible materials</b>



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#### SECTION 10. Stability and reactivity ..../

#### PORTLAND CEMENT CLINKER

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

#### HYDRATED LIME

Avoid contact with: acids. 10.6. Hazardous decomposition products

## PORTLAND CEMENT CLINKER

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 (Dermal) of the mixture:

> HYDRATED LIME LD50 (Dermal): LD50 (Oral):

> 2500 mg/kg

Not classified (no significant component)

Not classified (no significant component) Not classified (no significant component)

> 2000 mg/kg

#### 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



## SECTION 11. Toxicological information

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

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

#### 12.2. Persistence and degradability

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.



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#### SECTION 13. Disposal considerations

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

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

PORTLAND CEMENT CLINKER REACH Reg.: 02-2119682167-31-0000

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

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

None



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#### SECTION 15. Regulatory information

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. 1Serious eye damage, category 1Skin Irrit. 2Skin irritation, category 2STOT SE 3Specific target organ toxicity - single exposure, categorSkin Sens. 1BSkin sensitization, category 1BH318Causes serious eye damage.H315Causes skin irritation.H335May cause respiratory irritation.H317May cause an allergic skin reaction.	ry 3
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Use descriptor system: **SU** 19

Building and construction work

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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- 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



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#### SECTION 16. Other information

- 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)
- 23. Delegated Regulation (UE) 2023/707
- 24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
- 25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
- 26. Delegated Regulation (UE) 2024/197 (XXI 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: 01 / 02 / 04 / 09 / 13 / 15.