

Material Safety Data Sheet (in compliance with Regulation [EC]1907/2006, [EC]1272/2008 and [EC]453/2010)			
Gebrüder Dorfner GmbH & Co. KG			
Product name: DORKAPUR®			
Version 3	Date create: 30.06.2023	Revision date: 02.06.2025	page 1 of 11

ARTICLE 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1 Product identifier

Substance	Calcined Kaolin
Chemical name/ synonym	Anhydrous aluminium silicate / calcined China Clay
Trade name	Non exhaustive list: DORKAPUR® 100
CAS- №.:	92704-41-1
EC-№.	296-473-8
REACH Registration number:	Exempted in accordance with Annex V.7 of Regulation (EC) 1907/2006

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

Main applications - non exhaustive list:
Filler and / or ingredient for production of emulsion- and silicate paints, plastics, elastomer, paper, enamels, ceramics, refractory material, adhesives, building material

1.3 Details of the supplier of the safety data sheet

Gebr. Dorfner GmbH & Co. KG

Scharhof 1
D-92242 Hirschau

Phone №	+49 9622 82-0
Fax №:	+49 9622 82-206
E-Mail-adress of responsible person for this Material Safety Data Sheet :	SDBKaolin@dorfner.com

1.4 Emergency telephone	+49 9622 820	(not available outside office hours)
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ARTICLE 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	This product does not meet the criteris for classification as hazardous as defined in the Regulation (EC) 1272/2008.
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No classification

2.2 Label elements	Labelling according to Regulation (EC) No 1272/2008 [CLP]: None
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2.3 Other hazards	This product is an anorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. Kaolin calcined is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
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The product is a fine powder and can form dust even with low energy input.

ARTICLE 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Name	Percentage by mass	CAS-№.	EC-№.	Classification according (EC)1272/2008	REACH Registration number
Calcined Kaolin	100	92704-41-1	296-473-8	No classification	exempted from the obligation to register in accordance with Article 7 of Annex V

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Kaolin is a UVCB substance sub-type 4, this means a substance of mineral origin produced by a refining process without chemical reactions.

This product contains less than 1% fine fraction of crystalline silica, which is classified as STOT RE 1.

ARTICLE 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse with copious quantities of water and seek medical attention if any irritation persists.
Inhalation	Move source of dust or move person to fresh air. Consult doctor in case of complaints.
Ingestion	No special measure; rinse mouth with water. Seek medical advice if any discomfort continues.
Skin contact	No special first aid measures necessary.

4.2 Most important symptoms and effects, both acute and delayed

The acute symptoms would give pain in the eyes because of dust entry. No delayed effects are anticipated if first aid treatment is applied and is effective.

4.3 Indication of any immediate medical attention and special treatment needed

No need for immediate medical attention; follow the advises given in section 4.1

ARTICLE 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

No specific extinguishing media is needed.

5.2 Special hazards arising from the substance or mixture

None. The material is not flammable, and it does not lead to hazardous thermal decomposition products.

5.3 Advice for firefighters

Avoid generation of dust. Use breathing apparatus.

Product on floor when wetted will become slippery and may present a hazard; wear anti-slip boots.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

ARTICLE 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep dust levels to a minimum.

Avoid contact with skin, eyes, and clothing – wear suitable protective equipment (see section 8).

Avoid inhalation of dust – ensure that sufficient ventilation or suitable respiratory protective equipment is used, wear suitable protective equipment (see section 8).

Take care of wet product on floor, which presents a slip hazard.

6.2 Environmental precautions

No special requirements.

6.3 Methods and material for containment and cleaning up

Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation.

6.4 Reference to other sections

For more information on exposure controls/ personal protection or disposal considerations, please refer to sections 8 and 13 of this safety data sheet.

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ARTICLE 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment refer to section 8 of this safety data sheet. Other suitable controls may include enclosure, isolation, water suppression. Handle packaged products carefully to prevent accidental bursting. If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16. Do not to eat, drink and smoke in work areas; wash hands after use; remove contaminated clothing and protective equipment before entering eating areas.
7.2 Conditions for safe storage, including any incompatibilities	Technical measures/Safety precautions: Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting. Pneumatic conveying through plastic lines may result in static charge buildup. Convey through metal lines.
7.3 Specific end use(s)	If you require advice on specific uses, please contact your supplier.

ARTICLE 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters	Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).
Occupational exposure limit	Occupational Exposure Limit for inhalable dust: 10 mg/m³ 8 hours TWA European Binding OEL (Occupational Exposure Limit) according to Directive (EU) 2004/37/EG: Respirable crystalline silica dust: 0,1 mg/m³ 8 hours TWA Deviating OEL find attached for all countries of the EU. For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.
8.2 Exposure controls	
8.2.1 Appropriate engineering controls	Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.
8.2.2. Individual protection measures, such as personal protective equipment	
Eye/face protection	In case of considerably dust generation, tight fitting goggles with side shields, or wide vision full goggles.
Skin protection	No specific requirement.
Hand protection	Appropriate protection (e.g. gloves acc. to EN 374, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.
Respiratory protection	Local ventilation to keep levels below established threshold values is recommended. In case of prolonged exposure to airborne dust concentrations, a suitable particle filter mask type FFP2 or FFP3 (European Norm 143) or

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8.2.3 Environmental exposure controls	that complies with the requirements of national legislation is recommended.
	All ventilation systems should be filtered before discharge to atmosphere.
	Avoid releasing to the environment. Contain the spillage.

ARTICLE 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid (powder)
Colour	White
Odour	Odourless
Melting point:	> 450 °C (study result, EU A.1 method)
Boiling point:	not applicable (solid with a melting point > 450 °C)
Flash point:	not applicable (solid with a melting point > 450 °C)
Evaporation rate:	not applicable (solid with a melting point > 450 °C)
Flammability:	non flammable (study result, EU A.10 method)
Explosive limits:	do not apply to solids
Flash point	not applicable
Auto ignition temperature:	no relative self-ignition temperature below 400 °C (study result, EU A.16 method)
Decomposition temperature:	not applicable (solid with a melting point > 450 °C)
pH-value (100 g/l water at 20°C)	Not determined
Kinematic viscosity	not applicable (solid with a melting point > 450 °C)
Solubility in water:	< 2 mg/L at 20°C (study results, EU A.6 method)
Partition coefficient n-octanol/water:	not applicable (inorganic substance)
Vapour pressure:	not applicable (solid with a melting point > 450 °C)
Relative density:	2.3 g/cm ³
Vapour density:	not applicable (solid with a melting point > 450 °C)
Particle characteristics:	Median value 4 to 5,5 µm (volume distribution based on sedimentation) Specific surface 6 - 7 m ² /g

9.2 Other information	no other information
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ARTICLE 10: Stability and Reactivity

10.1 Reactivity	Inert, not reactive
10.2 Chemical stability	Kaolin calcined is chemically stable.
10.3 Possibility of hazardous reactions	No hazardous reactions.
10.4 Conditions to avoid	Forms slippery and water-slippery coatings. Avoid dust formation.
10.5 Incompatible materials	None.
10.6 Hazardous decomposition products	None.

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ARTICLE 11: Toxicological Information

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

Acute toxicity	Kaolin calcined is not acutely toxic. Oral LD ₅₀ > 5000 mg/kg (40 CFR Part 160) Dermal LD ₅₀ > 5000 mg/kg (40 CFR Part 160) Inhalation LC ₅₀ > 2,19 mg/Liter Air (OECD 403)
Skin corrosion / irritation	Kaolin calcined is not irritating to skin (OECD 404).
Serious eye damage / irritation	Kaolin calcined is not irritating to eye (OECD 405).
Respiratory or skin sensitisation	Kaolin calcined is not a skin sensitiser in accordance with the local lymph node assay (OECD 429)
Germ cell mutagenicity	Kaolin calcined is not genotoxic (in vitro study results OECD 471)
Carcinogenicity	Read-across with the substance kaolin In studies where kaolin has been administered via intratracheal installation, kaolin behaves as a poorly soluble particulate of low toxicity with inflammatory responses of lung tissue. Epidemiological studies covering a large number of workers did not reveal an explicit association between kaolin exposure and tumour formation. In summary, no concern on carcinogenicity is triggered by animal studies or by epidemiological findings.
Reproductive toxicity	No data available.
STOT - single exposure	No organ toxicity observed in acute tests.
STOT - repeated exposure	<i>Read-across with the substance kaolin</i> Epidemiological studies show that exposure to high levels of kaolin dust may lead to pneumoconiosis. It is likely that the severity of any effects are related to the level of respirable crystalline silica present in the material.
Aspiration hazard	No data available.

11.2 Information on other hazards

Kaolin calcined is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

None other hazards known.

ARTICLE 12: Ecological Information

12.1 Toxicity

Acute/Prolonged toxicity to fish	LC ₅₀ (96h) for freshwater fish (rainbow trout <i>Oncorhynchus mykiss</i>): >1000 mg/L (Method OECD 203)
Acute/Prolonged toxicity to aquatic invertebrates	EC ₅₀ (48h) for aquatic invertebrates (<i>Daphnia magna</i>): >707.9 mg/L (Method OECD 202)
Acute/Prolonged toxicity to aquatic plants	EC ₅₀ (72h) for freshwater algae (<i>Raphidocelis Subcapitata</i>): > 1000 mg/L (Method OECD 201)

12.2 Persistence and degradability

Abiotic Degradation	The substance is inorganic and therefore will not undergo abiotic degradation.
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Biodegradation

The substance is inorganic and therefore will not undergo biodegradation.

12.3 Bioaccumulative potential

Not relevant for inorganic substances. Bioaccumulation is not expected.

12.4 Mobility in soil

Kaolin calcined is almost insoluble and thus presents a low mobility in most soils.

12.5 Results of PBT und vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties

Available data for the substance have been considered against the criteria laid down in Regulations ((EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605) and found not to apply.

12.7 Other adverse effects

According to the criteria of the European classification and labelling system, the substance does not require classification as hazardous for the environment.

ARTICLE13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products

Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local and national regulations.

Packaging treatment

Dust formation from residues in packaging should be avoided and suitable worker protection assured. Keep contaminated packaging materials in closed containers. Recycling and disposal of packaging materials must be carried out in accordance with local regulations.

ARTICLE 14: Transport Information

14.1 UN-Number

not relevant

14.2 UN proper shipping name

not relevant

14.3 Transport hazard class

ADR: not classified

IMDG: not classified

ICAO/IATA: not classified

RID: not classified

14.4 Packaging group

not applicable

14.5 Environmental hazards

not relevant

14.6 Special precautions for user

Avoid any release of dust during transportation, by using air-tight tanks for powders and covered trucks for pebbles.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for the delivery form of the product.

ARTICLE 15: Regulatory Information

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

Regulations in EU

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.

The SDS complies with Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006.

National regulations (UK):

Health & Safety Executive (UK): Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003).

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National regulations (Ireland):	The OEL (Occupational Exposure Limit) for silica dust in United Kingdom is 0,1 mg/m ³ .
	The OEL (Occupational Exposure Limit) for respirable kaolin in United Kingdom is 2 mg/m ³ .
	Code of Practice for the Safety Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) & the Safety Health and Welfare at Work (Carcinogens) Regulations (2001-2019) The OEL (Occupational Exposure Limit) for silica dust in Ireland is 0,1 mg/m ³ .
15.2 Chemical safety assessment	Kaolin calcined is exempted from REACH registration in accordance with Annex V.7 of Regulation (EC) 1907/2006. Thus, no formal chemical safety assessment has been carried out for this substance by the supplier.

ARTICLE 16: OTHER INFORMATION

Indication of the changes made to the previous version of the SDS	The SDS has been updated and now includes information that calcined kaolin is listed in Taiwan's TCSI (Taiwan Chemical Information Register), as well as the updated company logo and current company name.
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Abbreviations and acronyms:

STOT RE:	Specific target organ toxicity repeated exposure
EC ₅₀ :	median effect concentration
LC ₅₀ :	median lethal concentration
LD ₅₀ :	median lethal dose
OEL:	occupational exposure limit
PBT:	persistent bioaccumulative toxic
TWA:	time weighted average
vPvB:	very persistent, very bioaccumulative
EU- BOELV	binding European occupational exposure limit value

Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans (human carcinogen category 1). However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.). In 2009, in the Monographs 100 series, IARC confirmed its classification of Silica Dust, Crystalline, in the form of Quartz and Cristobalite (IARC Monographs, Volume 100C, 2012).

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003).

So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.

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A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the **Good Practices Guide**, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

A source of information on how to manage the risks on respirable crystalline silica is the website <https://safesilica.eu/>. In addition, it provides a handy FAQs section, as well as information on the science behind crystalline silica.

Justification of DIRECTIVE (EU) 2017/2398 of the European Parliament and of the Council_ of 12 December 2017 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work:

(18) There is sufficient evidence of the carcinogenicity of respirable crystalline silica dust. On the basis of available information, including scientific and technical data, a limit value for respirable crystalline silica dust should be established. Respirable crystalline silica dust generated by a work process is not subject to classification in accordance with Regulation (EC) No 1272/2008. It is therefore appropriate to include work involving exposure to respirable crystalline silica dust generated by a work process in Annex I to Directive 2004/37/EC and to establish a limit value for respirable crystalline silica dust ('respirable fraction') that should be subject to review, in particular in light of the number of workers exposed.

Literature on the classification of TiO₂: 14th ATP of the CLP- Regulation: COMMISSION DELEGATED REGULATION (EU) 2020/217 of 4 October 2019 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures and correcting that Regulation

Training

Workers must be informed of the presence of crystalline silica and respirable Titanium dioxide and trained in the proper use and handling of this product as required under applicable regulations.

International regulations

Australia
China
Europe
Canada
Korea
New Zealand
Philippines
Taiwan
United States

Listing Kaolin calcined in international chemical registers:

AICS	No 66402-68-4
IECSC	CAS No 92704-41-1
EINECS	EC 296-473-8
DSL	CAS No 92704-41-1
ECL	KE 21773
NZIoC	CAS No 92704-41-1
PICCS	CAS No 92704-41-1
TCSI	CAS No 92704-41-1
TSCA	CAS No 92704-41-1

Third party material

Insofar as materials not manufactured or supplied by Gebr. Dorfner are used in conjunction with, or instead of Gebr. Dorfner materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these or other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Gebr. Dorfner's materials in conjunction with materials from another supplier.

Liability

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The information describes exclusively the safety requirements for the product(s) and is based on the present level or our knowledge. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. No liability can be accepted in respect of the use of our product(s) in conjunction with materials from another supplier.

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Attachment

Occupational Exposure Limits in mg/m³ 8 hours TWA – Respirable dust – in EU 27¹ + Norway, Switzerland & UK

Country/ Authority (see next page)	Aveolen- gängiger Staub (A-Staub)	Quartz	Cristobalite	Tridymite	Amorphous silica	Fused silica	Kaolin	Mica	Titanium dioxide
Austria /I	3	0,05	0,05	0,05	4	0,3		10 (E- Staub)	5
Belgium /II	3	0,1	0,05	0,05	2	0,1	2	3	10
Bulgaria /III	4	0,07	0,07	0,07	1		3	3	10
Czech Republic /IV		0,1	0,1	0,1	4			2	
Cyprus /V	/	0,1	0,1	0,1	2	/	/	/	10
Denmark /VI	5	0,1	0,05	0,05		0,1	2		6
Estonia	5	0,1	0,05	0,05	2				5
Finland /VII	10	0,05	0,05	0,05			2		
France/IX	5	0,1	0,05	0,05			10		10
Germany/X	1,25	0,1	0,1	0,1		0,3			0,3
Greece/XI	5	0,1	0,05	0,05			5		5
Hungary		0,1	0,1	0,1					
Ireland /XII	4	0,1	0,1	0,1	2,4	0,08	2	3	4
Italy /XIII	3	0,025	0,025	0,025		0,1	2	3	
Latvia		0,1	0,1	0,1	1	1		4	10
Lithuania /XIV	5	0,1	0,05	0,05					5
Luxembourg /XV	6	0,1	0,1	0,1		0,3			
Malta /XVI		0,1	0,1	0,1					
Netherlands/XVII	5	0,075	0,075	0,075			10	2,5	
Norway/XVIII	5	0,1	0,05	0,05	1,5			3	5
Poland	10E ³	0,1	0,1	0,1	2	1	10E ³		10E ³
Portugal/XIX	3	0,025	0,025	0,025		0,1	2	3	10
Romania/XX	10	0,1	0,05	0,05			2	3	10
Slovakia		0,1	0,1	0,1	2			2	5
Slovenia	1,25	0,05	0,05	0,05	4	0,3			
Spain/XXI	3	0,05	0,05	0,05		0,1	2	2	10
Sweden/XXII	2,5	0,1	0,05	0,05					5
Switzerland/XXIII	3	0,15	0,15	0,15	4	0,3	3	3	3
UK/XXIV	4	0,1	0,1	0,1	2,4	0,08	2	0,8	4

1 Defined for a density of 1g/cm³ (example For a particle density of 2.5g/cm³ the OEL is 1.25 mg/m³)

3 E= frakcja wdychalna

4 When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

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Country Adopted by/Law denomination OEL Name (if specific)

Austria I	Bundesministerium für Arbeit und Soziales Maximale ArbeitsplatzKonzentration (MAK)
Belgium II	Ministère de l'Emploi et du Travail
Bulgaria III	Ministry of Labour and Social Policy and Ministry of Health. Ordinance n°13 of 30/12/2003 Limit Values
Cyprus IV	Department of Labour Inspection. Control of factory atmosphere and dangerous substances in factories, Regulations of 1981.
Czech Republic V	Governmental Directive n°441/2004
Denmark VI	Direktoratet for Arbejdstilsynet Threshold Limit Value (TLV)
Finland VII	National Board of Labour Protection Occupational Exposure Standard
France VIII	Ministère de l'Industrie (RGIE) Empoussiérage de référence
IX	Ministère du Travail Valeur limite de Moyenne d'Exposition
Germany X	Bundesministerium für Arbeit Maximale ArbeitsplatzKonzentration (MAK)
Greece XI	Legislation for mining activities
Ireland XII	2002 Code of Practice for the Safety, Health & Welfare at Work (CoP)
Italy XIII	Associazione Italiana Degli Igienisti Industriali Threshold Limit Values (based on ACGIH TLVs)
Lithuania XIV	Dėl Lietuvos higienos normos HN 23:2001 Ilgalaikio poveikio ribinė vertė (IPRV)
Luxembourg XV	Bundesministerium für Arbeit; Maximale Arbeitsplatz Konzentration (MAK)
Malta XVI	OHSa – LN120 of 2003, www.ohsa.org.mt OELVs
Netherlands XVII	Ministerie van Sociale Zaken en Werkgelegenheid Publieke grenswaarden http://www.ser.nl/en/oel_database.aspx
Norway XVIII	Direktoratet for Arbeidstilsynet Administrative Normer (8hTWA) for Forurensing i Arbeidsmiljøet
Portugal XIX	Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2007 Valores Limite de Exposição (VLE)
Romania XX	Government Decision n° 355/2007 regarding workers' health surveillance. Government Decision n° 1093/2006 regarding carcinogenic agents (in Annex 3: Quartz, Cristobalite, Tridymite). OEL
Spain XXI	Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007 Valores Limites
Sweden XXII	National Board of Occupational Safety and Health Yrkeshygieniska Gränsvärden
Switzerland XXIII	Valeur limite de Moyenne d'Exposition
United Kingdom	
XXIV	Health & Safety Executive Workplace Exposure Limits (WEL)

Sources :

- IMA-Europe. Date : May 2010, updated version available at <http://www.ima-europe.eu/otherPublications.html>
- [IFA - Arbeitsplatzgrenzwerte \(AGW\): Ausländische und EU-Grenzwerte \(dguv.de\)](#)
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