

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name: Granuscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page1 of 10

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Mixture:

Main component of the mixture:	Quartz
Other means of Identification:	Monocrystalline silicon dioxide SiO ₂ , coloured with added inorganic pigments and binders, all of the additives being present in various proportions.
Trade name:	Granuscan Colour SIG This safety data sheet is valid for all colours and grain sizes.
CAS No.:	14808-60-7
REACH Registration No.:	exempted from Registration according to the provisions of Article 7, Annex V of Regulation (EC) No 1907/200

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

Relevant identified uses – non exhaustive list:
Construction materials, composites, floor and wall systems

1.3 Details of the supplier of the safety data sheet

Telephone number:	Scanmineral Heljesvägen 10 437 36 Lindome Sweden AB +46 31 99 49 70
Telefax:	+46 31 99 48 70
E-mail address of competent person responsible for the SDS:	patrik.bengtsson@scanmineral.se

1.4 Emergency telephone number

Call your local emergency number

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Granuscan Colour SIG does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. No classification

2.2 Label elements

No labelling according to Regulation (EC) No 1272/2008

Hazard statement:

EUH212: Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.
EUH210: Safety data sheet available on request.

2.3 Other hazards

This product is an inorganic mixture and fails to meet the criteria set out in Annex XIII of the REACH Regulation for the identification of PBT substances and vPvB.
Quartz has no endocrine disrupting properties as defined in Commission Delegated Regulation (EU) 2017/2100 or set out in Commission Regulation (EU) 2018/605.
Depending on the type of handling and use, airborne respirable crystalline silica may be generated. Prolonged/extensive exposure to respirable crystalline silica dusts can potentially cause silicosis, a long-term lung disease.

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)			SCANMINERAL MINERALS-MACHINES-KNOW-HOW
Product name: Granuscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page2 of 10

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Components

Substance name	Weight % content	CAS No.	EC No.	Classification according to Regulation (EC) No 1278/2008 (CLP)	REACH Registration No.
Quartz	≥ 92	14808-60-7	238-878-4	No classification	exempted from the obligation to register in accordance with Article 7 of Annex V
Pigments	≤ 5	Various inorganic pigments			
Binder	≤ 3	Inorganic potassium silicate-based binder			

Impurities

This product (mixture in powder form) contains more than 1% of titanium dioxide in the form of particles with an aerodynamic diameter < 10 µm, classified as Carc.2 by inhalation, in incorporated form.

This product contains less than 1% respirable crystalline silica classified as STOT RE1.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation	Remove affected person from source of contamination. Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Following skin contact	No special first aid measures required.
Following eye contact	Rinse cautiously with water for several minutes. Get medical attention if any discomfort continues.
Following ingestion	No special first aid measures required.

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms result from grain dust exposure. 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 particular measures required.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media	No particular extinguishing media needed.
5.2 Special hazards arising from the substance or mixture	Not flammable No dangerous thermal decomposition reaction.
5.3 Advice for firefighters	Avoid creating airborne dust. When airborne dust is created, wear respiratory protection (FFP3 particle filtering efficiency).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Provide adequate ventilation with fresh air. As far as possible, prevent dust from becoming airborne When airborne dust is
-------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name: Granuscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page3 of 10

created, wear respiratory protection (FFP3 particle filtering efficiency).

Avoid contact with skin and eyes.

No particular requirements.

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

Personal protective equipment, refer to section 8.2.2

Disposal considerations, refer to section 13.

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up

6.4 Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Prevent dust from becoming airborne, at least reduce the amount of migratory dust as much as possible. Areas with increased dust formation must be equipped with appropriate ventilation systems. In case of inadequate ventilation, wear appropriate respiratory protection. Use of closed systems and dust suppression by application of water is also suitable to prevent fines from being carried off into the air.

To avoid any damage to the packaging, make sure it is handled with care. For further information on safe handling refer additionally to the Best Practices Guide "Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products containing it" (see Section 16).

Do not eat, drink or smoke when using this product/in work areas. Wash hands thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas and after work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Minimize dust formation. Avoid dust drifting during loading operations. Keep container(s) closed. Store packaged product(s) in such a way that the packaging does not become damaged.

Keep away from acids.

Pneumatic conveyor systems with plastic tubes can lead to electrostatic charges. Therefore, use of metal tubes, for instance, made of aluminium alloys, would be preferable.

7.3 Specific end use(s)

Information on specific conditions of use is provided by the supplier of the product.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Respect the applicable occupational exposure limit values.

The occupational exposure limit for respiratory dust throughout Europe is 10 mg/m³- 8-hour time-weighted average (TWA) exposure.

Limit values for quartz and respiratory dust are listed in the appendix of this safety data sheet. Information on limit values applicable in other countries are provided by skilled experts on Safety, Hygiene and Health protection at Work or by the respective regulatory authorities of each country.

Occupational exposure limit values

EU-BOELV according to Directive 2004/37/EC

Respiratory crystalline silica: 0,1 mg/ m³ eight-hour time-weighted average (TWA)

8.2 Exposure controls

Safety data sheet

(according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)

SCANMINERAL
MINERALS-MACHINES-KNOW-HOW**Product name:** Granuscan Colour SIG

Version 5.0

Date: 31/08/2010

Date of review: 14/05/2021

Page4 of 10

8.2. 1 Appropriate engineering controls

Prevent dust from becoming airborne. Make sure that dust exposure falls within the limits by using closed processes, installing local exhaust systems or implementing other appropriate technical measures. If activities of persons lead to dust or mist formation, it must be ensured that the dust concentration in the air of working zones remains within the limit values. Organisational measures need to be taken; i.e., Keep away people from areas exposed to dust. Change dirty work clothes and clean before reuse.

8.2.2. Individual protection measures, such as personal protective equipment**Eye/face protection**

Use dust-tight protective goggles in areas exposed to dust.

Skin protection

No particular requirements.

Hand protection

People who suffer from dermatitis or have particularly sensitive skin should take appropriate protective measures (e.g., wear gloves or use protective cream). Wash hands thoroughly after handling.

Respiratory protection

In case of long-term exposure to dust, wear protective clothing in compliance with applicable EU or national legislation.

Use of particle filtering half masks or full-face, class 2 or class 3 filter (FFP2 – FFP3) recommended. See EN 143:2000 Respiratory protective devices - Particle filters.

8.2.3 Environmental exposure controls

The exhaust air from extraction units must be conducted through filters.

Prevent dust from becoming airborne and dust drift caused by wind.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical state	solid (powder)
Colour	colourful
Odour	Odourless
Melting point/freezing point	> 1610 °C
Initial boiling point and boiling range	2230 – 2590 °C
Flammability	Non-flammable (non-combustible)
Lower and upper explosion limit	Non-explosive (no chemical groups associated with explosive properties).
Flash point	Not applicable (solid with a melting point > 1610 °C)
Auto-ignition temperature:	Not applicable (solid with a melting point > 1610 °C)
Decomposition temperature	Not applicable (solid with a melting point > 1610 °C)
pH	8 - 10
Kinematic viscosity	Not applicable (solid with a melting point > 1610 °C)
Solubility	Dissolves in hydrogen fluoride
Partition coefficient n-octanol/water (log value)	Not applicable (inorganic substance)
Vapour pressure	Not applicable (solid with a melting point > 1610 °C)
Relative density	2- 3 g/cm ³
Relative vapour density	Not applicable (solid with a melting point > 1610 °C)
Particle characteristics	

Trade name	Particle size	Method of calculation
Granuscan Colour SIG	d ₅₀ : 1.3 mm	Camsizer

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name: Grauscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page5 of 10

9.2 Other information

Quartz is completely oxidised and chemically stable under normal conditions, non-combustible and non-flammable. It is a rock-forming mineral. The behaviour under the effect of temperature is known from its use as raw material in porcelain and glass production.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Inert, non-reactive
10.2 Chemical stability	Quartz is chemically stable in contact with diluted acids or alkalis. Quartz is soluble in hydrofluoric acid. Colour coating limitedly resistant to diluted acids and alkalis.
10.3 Possibility of hazardous reactions	No dangerous reactions.
10.4 Conditions to avoid	None
10.5 Incompatible materials	None
10.6 Hazardous decomposition products	None

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity	On the basis of the data which is available, the substance does not meet the classification criteria.
Skin corrosion/irritation	On the basis of the data which is available, the substance does not meet the classification criteria.
Serious eye damage/irritation	On the basis of the data which is available, the substance does not meet the classification criteria.
Respiratory or skin sensitisation	On the basis of the data which is available, the substance does not meet the classification criteria.
Germ cell mutagenicity	On the basis of the data which is available, the substance does not meet the classification criteria.
Carcinogenicity	On the basis of the data which is available, the substance does not meet the classification criteria.
Reproductive toxicity	On the basis of the data which is available, the substance does not meet the classification criteria.
Specific target organ toxicity - single exposure	On the basis of the data which is available, the substance does not meet the classification criteria.
Specific target organ toxicity - repeated exposure	On the basis of the data which is available, the substance does not meet the classification criteria.
Aspiration hazard	On the basis of the data which is available, the substance does not meet the classification criteria.

11.2 Information on other hazards

No other hazards are known

Quartz has no endocrine disrupting properties as defined in Commission Delegated Regulation (EU) 2017/2100 or set out in Commission Regulation (EU) 2018/605.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Quartz is not classified as hazardous to water according to 1272/2008/EC.
----------------------	---------------------------------------------------------------------------

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS—MACHINES—KNOW-HOW	
Product name: Grauscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page6 of 10

12.2 Persistence and degradability

Quartz is a chemically stable inorganic substance; abiotic or biological degradation is therefore not to be expected.

12.3 Bioaccumulative potential

Quartz is inorganic substance; bioaccumulation is therefore not to be expected.

12.4 Mobility in soil

Quartz is insoluble in water. Mobility in the soil is therefore negligible.

12.5 Results of PBT and vPvB assessment

The mixture does not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties

The data available for quartz have been reviewed against the criteria set out in the Regulations ((EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605) and found not to be applicable.

12.7 Other adverse effects

No specific adverse effects are known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products Within existing possibilities, recycling should be preferred to disposal. Dispose of in accordance with regional provisions.

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

SECTION 14: Transport information

14.1 UN number or ID number

Non-relevant

14.2 UN proper shipping name

Non-relevant

14.3 Transport hazard class(es)

ADR: No classification
IMDG: No classification
ICAO/IATA: No classification
RID: No classification

Packaging group

Non-relevant

14.5 Environmental hazards

Non-relevant

14.6 Special precautions for user

Avoid creating airborne dust; e. g. closed containers or covering (covers, tarpaulins)

14.7 Maritime transport in bulk according to IMO instruments

Non-relevant

SECTION 15: REGULATORY INFORMATION

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

National regulations (D): Adhere to TRGS 559, TRGS 906 and TRGS 910

Water hazard class (WGK) non-hazardous to water (NWG)

15.2 Chemical Safety Assessment

Quartz is exempted from the obligation to register in accordance with Article 7 of Annex V of the REACH regulation (EC) 1907/2006. Therefore, no formal chemical safety assessment has been carried out for this substance by the supplier.

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name:		Grauscan Colour SIG	
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page7 of 10

SECTION 16: OTHER INFORMATION

Directory of changes that have been made to the previous version of this safety data sheet

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

The product has been classified in accordance with Regulation (EU) 2020/217 (ATP 14) (Adaptation to Technical Progress) which amends, for the purposes of its adaptation to technical and scientific progress Regulation (EC) No 1272/2008 (CLP regulation).

Relevant H-statements

EUH212: Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

EUH210: Safety data sheet available on request.

Abbreviations and acronyms

STOT RE: Specific Target Organ Toxicity – repeated exposure

OEL: Occupational Exposure Limit

PBT: Persistent, Bioaccumulative and Toxic substance

TWA: time weighted average

vPvB: Very Persistent and Very Bioaccumulative

TRGS: Technical rules for dangerous substances (Germany)

NWG: non-hazardous to water

EU-BOELV: Binding occupational exposure limit values in the EU

Training

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

Preamble to 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 (quartz fines). 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.

(19) Guides and examples of good practices produced by the Commission, the Member States or the social partners, or other initiatives, such as the Social Dialogue 'Agreement on Workers' Health Protection Through the Good Handling and Use of Crystalline Silica and Products Containing it' (NEPSi) are valuable and necessary instruments to complement regulatory measures and in particular to support the effective implementation of limit values, and should therefore be given serious consideration. They include measures to prevent or minimise exposure such as water-assisted suppression to prevent dust from becoming airborne in the case of respirable crystalline silica.

Social dialogue on respirable silica

A multi-sectoral social dialogue 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). Full 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

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name: Grauscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page8 of 10

crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

Listing of quartz in international chemical registers

Australia	AICS	CAS No. 14808-60-7
China	IECSC	CAS No. 14808-60-7
Europe	EINECS	EC 238-878-4
Canada	DSL	CAS No. 14808-60-7
Korea	ECL	KE 29983
New Zealand	NZIoC	CAS No. 14808-60-7
Japan	ENCS/ISHL/MITI	(1)-548 (ENCS/ISHL)
Philippines	PICCS	CAS No. 14808-60-7
Taiwan	NECSI	CAS No. 14808-60-7
USA	TSCA	CAS No. 14808-60-7
Switzerland	Swiss ID-No.	

Material from other suppliers

If materials from other suppliers, that are not manufactured nor supplied by Scanmineral are used together with material from Scanmineral, the customer alone shall be responsible to procure all necessary technical data and information regarding the properties of these or other materials from the respective supplier or manufacturer. Scanmineral cannot be considered as responsible due solely to the use of its products together with material from other suppliers.

Liability

This information is based on our current knowledge on the mentioned date and is intended to describe the product for the purposes of health, safety and environmental requirements only. No warranty, whether expressed or implied, or guarantee of specific product properties in the legal sense is intended or implied. It is the user's responsibility to ensure that the information provided is suitable and complete enough for his specific use. Scanmineral disclaims any liability for the use of its product(s) in combination with materials from other suppliers.

Product name: Gauscan Colour SIG

Version 5.0

Date: 31/08/2010

Date of review: 14/05/2021

Page9 of 10

APPENDIX

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

Country/ Authority (see next page)	Alveolar dust (A-dust)	Quartz	Cristobalite	Tridymite	Amorphous silica	Fused silica	Kaolin	Mica (glimmer)	Titanium dioxide
Austria /I	3	0.05	0.05	0.05	4	0.3		10 (respirable dust)	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 /IV	/	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 ⁴ /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 ³	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
Great Britain/XXIV	4	0.1	0.1	0.1	2.4	0.08	2	0.8	4

²Q : quartz percentage – K=1

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

Safety data sheet (according to Regulation (EC)1907/2006, (EC)1272/2008 and (EU) 453/2010)		SCANMINERAL MINERALS-MACHINES-KNOW-HOW	
Product name: Grauscan Colour SIG			
Version 5.0	Date: 31/08/2010	Date of review: 14/05/2021	Page10 of 10

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)
Germany X	Bundesministerium für Arbeit Maximale Arbeitsplatzkonzentration (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/oeel_database.aspx
Norway XVIII	Direktoratet for Arbejdstilsynet Administrative Normer (8hTWA) for Forurensing I Arbeidsmiljøet
Portugal XIX	Instituto Português 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)

Source:

- ❖ IMA-Europe. Date: May 2010, updated version available at <http://www.ima-europe.eu/otherPublications.html>
- ❖ 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