SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier
Substance name/ Trade name: **China - coarse**

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Test dust
Uses advised against: -

1.3 Details of the supplier of the safety data sheet
Manufacturer/ Supplier: KSL staubtechnik gmbh
Address/ PO Box: Westendstrasse 11
Nat.-Ident./ Postcode/ city: DE - 89415 Lauingen
Telephone/ Fax/ E-mail: +49 (0) 9072 / 95 00-0 / Fax no: -50 / info@ksl-staubtechnik.de

1.4 Emergency telephone number
+49 (0) 9072/ 95 00–0 (Accessibility: Mon-Thu 8am to 4pm, Fri 8am to 12pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
This product is contaminated with respirable quartz and is therefore classified as STOT RE2 according to the criteria defined in Regulation (EC) No. 1272/2008.
Depending on the handling and processing of the product, airborne respirable crystalline silica may form. Prolonged and/or intensive inhalation of respirable crystalline silica may cause pulmonary disease (silicosis). The main symptoms of silicosis include cough and respiratory problems/ shortness of breath. Following exposure to respirable crystalline silica, suitable protection and monitoring measures should be taken. According to TRGS 906, activities involving respirable crystalline silica in the form of quartz and cristobalite have a carcinogenic effect on humans.
The product should be handled with great caution in order to avoid dust formation.

2.1.1 Classification according to Regulation (EC) No. 1272/2008
Hazard class: STOT RE2
Hazard category: 2
Hazard warnings: H373 Can cause damage to lungs through prolonged or repeated exposure if inhaled.
This product contains between 1 and 10% respirable quartz.

2.2 Label elements
2.2.1 Label elements according to Regulation (EC) No. 1272/2008

GHS08

Signal word: Attention
Hazard warning: H373: Can cause damage to lungs through prolonged or repeated exposure if inhaled.
Safety precautions: P260: Do not breathe dust
P284: In case of inadequate ventilation wear respiratory protection.
P501: Dispose of contents (residual amounts)/ containers properly according to local regulations (avoid dust formation).

2.3 Other hazards
The product does not meet the criteria for PBT and vPvB substances according to Annex XIII of the REACH Regulation 1907/2006/EC.

SECTION 3: Composition/information on ingredients

3.1 Substances
The product is a mixture.

3.2 Mixtures
Composition/ information on ingredients
Description of the mixture: **China - coarse**
Hazardous ingredients: Quartz (SiO_2)
This product contains between 1 and 10% respirable quartz, which is classified as STOT RE2.

Product identifier	CAS No.	EC No.	Concen-tration range [M.-%]	Reg. no. (REACH)	Classification according to Regulation (EC) No. 1272/2008
Silicon dioxide SiO_2	14808-60-7	238-878-4	38-69%	exempt	- H373 - STOT RE2 - Category 2
Aluminium oxide Al_2O_3	1344-28-1	215-691-6	15-30%	01-2119529248-35-0017	-
Iron(III) oxide (Fe_2O_3)	1309-37-1	215-168-2	10-20%	01-2119457614-35-0000	-
Calcium magnesium carbonate $CaMg(CO_3)_2$	16389-88-1	240-440-2	6-12%	exempt	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:
If symptoms persist, it is advised to consult a doctor. Please specify substance/product and measures taken to the doctor.
After inhalation:
Ensure supply of fresh air. Any dust in the throat and nasal passages should be cleared promptly. Consult a doctor in case of symptoms such as discomfort, cough or persistent irritation. In general, inhalation is to be avoided.
After skin contact:
Wash with water and soap.
After eye contact:
If necessary, remove contact lenses and, holding the eyelid open, rinse the eye under running water to remove all particles. If possible, use an isotonic eye rinsing solution (0.9 % NaCl). Do not rub eyes when dry, since additional cornea damage could occur due to mechanical stress.
After ingestion:
Rinse mouth with plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Repeated inhaling of large amounts over a long period of time increases the risk of developing lung diseases (silicosis). The main symptoms of silicosis are cough and respiratory problems/ shortness of breath.
Dust may cause irritation of the eyes and respiratory tract (caused by foreign bodies).

4.3 Indication of any immediate medical attention and special treatment needed

There are no known special measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable:
Suitable extinguishing media in the work area/ environment.
Unsuitable:
None

5.2 Special hazards arising from the substance or mixture

None. Not combustible.

5.3 Advice for firefighters

None

5.4 Additional advice

No action is required because the mixture is not combustible.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Avoid dust formation. Wear protective clothing as described under Section 8. Follow the instructions for safe use, as described under Section 7.
6.1.2. For emergency responders
Emergency plans are not necessary. With high dust levels, respiratory protection is however required.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

6.3.1 Notes for containment
Avoid dust generation.

6.3.2 Notes for clean-up
Avoid inhalation. Avoid dry sweeping. Use tested spraying and vacuum cleaning systems. Use protective equipment.

6.3.3 Advice on inappropriate containment and cleaning methods
Blowing-off for cleaning purposes is not permitted.

6.4 Reference to other sections
See also Sections 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

7.1.1 Recommendations on safe handling
Avoid dust formation and deposits. Handle packaged products carefully in order to prevent the packaging from bursting open. Areas subject to dust generation must be equipped with suitable ventilation systems. In case of inadequate dust removal in the workplace, wear suitable respiratory protection (in compliance with the EN 143 standard). Gloves compliant to the EN 374 standard are recommended.

Measures to prevent fire and explosion
No special measures required.

Measures to prevent aerosol and dust generation
Sweep only with an appropriate cleaning agent. For cleaning, use suitable methods as dry as possible - such as vacuum intake - that do not cause dust generation.

Measures to protect the environment
No special measures required.

7.1.2 Advice on general occupational hygiene
During work do not drink, eat or smoke. Wash hands after use/ contact. In dusty atmosphere, use breathing masks and safety goggles.

7.2 Conditions for safe storage, including any incompatibilities

Advice on storage conditions
Store in dry and sealed containers, possibly the original ones. Keep away from foodstuffs, drinks and tobacco.

Requirements for storage rooms and vessels
No special measures required.

Storage class
VCI: 10-13 (non-flammable solids)

7.3 Specific end use(s)

Industry and sector specific guidance
Convenient and economical application with suitable equipment depending on the intended purpose. For specific end uses (see Section 1.2), no additional information is available.
Further information can be found i. a. in the Agreement on Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it (see Section 16).

SECTION 8: Exposure controls/ personal protection

8.1 Control parameters

Components with workplace-related limit values to be monitored:

Chemical identity	CAS No.	EC No.	National limit value	Exposure type	DNEL/ PNEC value	Comment/ Legal provision
General dust limit value	-	-	1.25 (A) mg/m³ (respirable)	inhalative	-	Workplace-related limit value TRGS 900
General dust limit value	-	-	10 (E) mg/m³ (inhalable)	inhalative	-	Workplace-related limit value TRGS 900
Silicon dioxide SiO_2	14808-60-7	238-878-4	*	inhalative	not available	List of carcinogenic activities or processes TRGS 906

* In Germany, there currently exists an assessment scale of 50 ug/m³ for activities or processes in which workers are exposed to respirable crystalline silica in the form of quartz m³ http://www.baua.de/de/Themen-von-A-Z/Gefahrstoffe/AGS/Neues-vom-AGS.html. Safety precautions, in particular the third and fourth section of the Hazardous Substances Ordinance (GefStoffV), must be observed.
The Occupational Exposure Limits (OEL) for respirable crystalline silica for EU countries, Norway and Switzerland can be found in the annex. For further information on the limit values of other countries, please consult a competent occupational hygiene expert or the local regulatory authority of the country involved.

8.2 Exposure controls

To comply with workplace-related limit values, combined technical and individual protection measures are often necessary. For the identified uses (Section 1.2), technical control devices and personal protection measures are recommended. Technical measures and the selection of appropriate processes have priority over the use of personal protective equipment.

8.2.1 Appropriate engineering controls

Avoid or minimise dust formation. Closed processes and local extraction devices are to be used in order to keep airborne dust concentrations below the permissible exposure limit value. With high dust content in the air, use a ventilation system. If dust formation cannot be avoided, the air must remain below exposure limit values through ventilation of the dust content. Organisational measures are to be applied, for example keeping people away from dusty areas.
Recommended measuring procedures for workplace-related measurements: see the professional association series of papers.

8.2.2 Individual protection measures, such as personal protective equipment

General
When the product is used as intended, no personal protective equipment is necessary. Treat the product in compliance with the safety instructions.

Eye/face protection
In case of dust generation, wear closed protective goggles according to the EN 166 Standard.

Skin/hand protection
People suffering from dermatitis or with very sensitive skin should take appropriate precautions (e.g. wear gloves or use protective cream). Wash hands after working. The use of gloves compliant to the EN 374 standard is recommended. Work clothes with long sleeves and trouser legs. Closed work shoes.

Respiratory protection
Install effective exhaust ventilation and/ or sufficient ventilation. In case the permissible exposure limit values in the workplace are exceeded, a breathing mask must be worn in accordance with the regulations applied in the EU or current national regulations (e.g. particle filter P2 according to the EN 143 standard).

Occupational hygiene
During work do not drink, eat or smoke. Wash your hands before any breaks and after finishing work, and if necessary have a shower. Avoid contact with eyes and skin. After work, workers should wash or have a shower and use skin care products. Clean contaminated clothing, shoes, watches, etc., before re-using.

8.2.3 Environmental exposure controls

See also Sections 6 and 7.

Air
Prevent wind-blown dispersal. Compliance with dust emission limit values according to the Technical Instructions on Air Quality Control.

Water
Wastewater and groundwater regulations must be observed.

Ground
Compliance with the Federal Soil Protection Ordinance. No special control measures required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a)	**Appearance:**	**- Aggregate state**	Powder - solid
		- Colour	reddish
(b)	**Odour**		odourless
(c)	**Odour threshold:**		not applicable
(d)	**pH-value:**		not determined
(e)	**Melting point/ freezing point:**		> 1500°C, 70-85% of the components of the mixture will melt
(f)	**Initial boiling and boiling range:**		not applicable
(g)	**Flash point:**		not applicable
(h)	**Evaporation rate:**		not applicable
(i)	**Flammability (solid, gas):**		not applicable
(j)	**Lower explosive limits:**		not applicable
(k)	**Vapour pressure:**		not applicable
(l)	**Vapour density:**		not applicable
(m)	**Relative density:**		not specified
(n)	**Solubility:**		negligible
(o)	**Partition coefficient:**		not applicable
(p)	**Auto-ignition temperature:**		not applicable
(q)	**Decomposition temperature:**		> 750°C (applies to the component calcium magnesium carbonate)
(r)	**Viscosity:**		not applicable as it is not a liquid
(s)	**Explosive properties:**		None
(t)	**Oxidising properties:**		not applicable, the mixture has no oxidising properties

9.2 Other information

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Inert product. Non-reactive.

10.2 Chemical stability

The mixture is stable.
Component iron oxide (10-20%): > 80°C, the product may become unstable and oxidise. This generates additional heat which, under unfavourable conditions, produces combustion of flammable materials. Do not store near heat sources.

10.3 Possibility of hazardous reactions
None

10.4 Conditions to avoid
Moisture and water during storage may cause lump formation and loss of product quality.
Temperatures > 80°C

10.5 Incompatible materials
Calcium magnesium carbonate reacts with acids with formation of calcium and magnesium salts and CO_2.

10.6 Hazardous decomposition products
None when the product is used as intended.
Over 750°C or upon reaction with acids, calcium magnesium carbonate decomposes with formation of CO_2 (gas).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Based on the available data, the classification criteria are not met.
Skin corrosion/irritation
Based on the available data, the classification criteria are not met.
Serious eye damage/irritation
Based on the available data, the classification criteria are not met.
Respiratory or skin sensitisation
Based on the available data, the classification criteria are not met.
Mutagenicity
Based on the available data, the classification criteria are not met.
Carcinogenicity
Based on the available data, the classification criteria are not met.
Reproductive toxicity
Based on the available data, the classification criteria are not met.
Aspiration hazard
Based on the available data, the classification criteria are not met.
Specific target organ toxicity — single exposure
Based on the available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure
Repeated exposure to dust may cause pulmonary disease (silicosis).

Delayed and immediate effects, as well as chronic effects from short and long term exposure
Immediate effects
Irritation of the eyes or respiratory tract caused by exposure to foreign bodies may occur
Chronic effects with prolonged exposure
This product is contaminated with between 1 and 10% respirable quartz and is therefore classified as STOT RE2 according to the criteria defined in Regulation (EC) No. 1272/2008.
Prolonged and/ or intensive exposure to dust containing respirable crystalline silica may cause silicosis. This disease consists of a nodular pulmonary fibrosis caused by the inhalation and deposit of mineral dust.
In 1997, the International Agency for Research on Cancer (IARC) concluded that occupational exposure to crystalline silica can cause lung cancer in humans. However, the IARC specified that this no longer applies to all forms of exposure and all types of crystalline silica. (IARC-Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, volume 68, IARC, Lyon, France.)
In 2003, the EU's Scientific Committee on Occupational Exposure Limits (SCOEL) came to the conclusion that the main effect of inhalation of respirable crystalline silica dust in humans is silicosis. "We have sufficient information to conclude that there is an increased relative risk of lung cancer for people who are suffering from silicosis. Employees working in quarries and in the ceramic industry who are exposed to crystalline silica dust, but that are not suffering from silicosis, are apparently not affected by this increased risk of lung cancer. Therefore, it can be assumed that prevention of silicosis also reduces the risk of cancer..."(SCOEL SUM Doc 1994-final, June 2003).
There are numerous indications that an increased risk of lung cancer is restricted to people who are already suffering from silicosis. The protection of workers against silicosis should be ensured in compliance with the specified regulatory occupational exposure limit values and, if required, by ensuring implementation of additional risk management measures (see Section 16).

SECTION 12: Ecological information

For the product, no ecotoxicological data is available.

12.1 Toxicity
Not relevant

12.2 Persistence and degradability
Not relevant

12.3 Bioaccumulative potential
Not relevant

12.4 Mobility in soil
Negligible

12.5 Results of PBT and vPvB assessment
Not relevant

12.6 Other adverse effects
No known specific harmful effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Collect the product dry. Avoid formation of dust.
It can be disposed of together with household waste in compliance with local regulations. If necessary, coordinate disposal with the local competent authority.
Recommendation
Agree on the correct waste code with the disposal company.
Waste code according to the European List of Waste (LOW)
010410 – dusty and powdery waste
Treatment of purified/unclean packaging
150106 – mixed packaging suitable for material recycling

The formation of dust as a result of the remains of packaging should be avoided. Store contaminated packaging materials in closed containers. The recycling and disposal of packaging materials must take place in accordance with local applicable regulations and should be performed by a certified waste management company. Do not use packaging materials several times.

SECTION 14: Transport information

With respect to transport regulations, the product is not hazardous (ADR, RID, ADN, IMDG, ICAO/IATA).

14.1 UN 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
No special measures

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environment regulations/legislation specific for the substance or mixture
The product does not fall within the registration requirement of EC Regulation 1907/2006 (REACH).

EU regulations
Among others, the EC Regulation 1907/2006 (REACH)

National regulations
When handling this product, the following valid legal provisions are i. a. to be complied with

VwVwS Water hazard class: nwg – not hazardous for water
TRGS 500 "precautions"
TRGS 559 "Mineral dust"
TRGS 900 "Work-place related limit values"
TRGS 906 "List of carcinogenic activities or processes according to §3 paragraph 2 no. 3 GefStoffV"
Technical Instructions on Air Quality Control

Regulation on occupational health care (Verordnung zur arbeitsmedizinischen Vorsorge - ArbMedVV)
Basic principles of the Institution for Statutory Accident Insurance and Prevention on occupational medical examinations

15.2 Chemical safety assessment
A safety assessment has not been carried out.

SECTION 16: Other information

16.1 Changes to the previous version
Section 8.1: change of the general dust limit value
Removal of old policies under points 2 and 3
Editorial reversion

16.2 Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ArbMedVV	Verordnung zur arbeitsmedizinischen Vorsorge (Regulation on occupational health care)
BImSchV	Bundes-Immissionsschutzverordnung (German Federal Emission Control Act)
BG	Berufsgenossenschaft (Institution for Statutory Accident Insurance and Prevention)
CAS	Chemical Abstracts Service
CLP	Classification, labelling and packaging (Regulation (EC) No. 1272/2008)
GefStoffV	Gefahrstoffverordnung (Hazardous Substances Ordinance)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International agreement on the Maritime transport of Hazardous Goods
PBT	Persistent, bio-accumulative and toxic
REACH	Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) 1907/2006)
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SCOEL	Scientific Committee for Occupational Exposure Limits
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
SWeRF	Size Weighted Relevant Fine Fraction
TRGS	Technische Regeln für Gefahrstoffe (Technical rules for hazardous substances)
VCI	Verband der chemischen Industrie e.V. (Registered association of the chemical industry)
vPvB	Very persistent, very bio-accumulative
VwVwS	Verwaltungsvorschrift wassergefährdende Stoffe (Administrative Regulation on the Classification of Substances hazardous to Waters into Water Hazard Classes)

16.3 Literature references and sources of data
With regard to the sources of key data and technical information, we refer, among others, to the information provided by the raw material supplier/ manufacturer or the ECHA Classification and Labelling Inventory.

16.4 Methods compliant with article 9 of Regulation (EC) No. 1272/2008 used to evaluate information for the purpose of classification
No own assessment of the mixture has been made.
Bridging principles for the classification of mixtures according to Regulation (EC) No. 1272/2008, article 6, paragraph 5 have been applied.
The classification of the water pollution class of this mixture has been carried out according to Point 3, Annex 4, of the VwVwS.
The respirable dust content of the quartz component (SiO_2) was determined using the SWeRF method.

16.5 Training appropriate for workers
In addition to training programmes for employees on the topics of health, safety and environment, companies must ensure that their employees read and understand this safety data and are able to implement its requirements.
Employees must be informed of the presence of crystalline quartz and trained on the intended use of the product.

16.6 Social dialogue on respirable crystalline silica
On 25 April 2006, the cross-sector "Agreement on Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it" was signed. This autonomous agreement, funded by the European Commission, is based on guidelines concerning good practices. The conditions specified in 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, its annexes and the guidelines concerning good practices can be found at http://www.nepsi.eu. These provide useful information and guidance for the handling of products containing respirable crystalline silica. References are available at EUROSIL (European Association of Industrial Silica Producers).

The supplement to Section 8.1 provides information and orientation on occupational safety:
The former withdrawn limit value for Germany for respirable silica: 0.15 mg/m^3

16.7 Disclaimer
The information contained in this safety data sheet describes the safety requirements of our product and is based on our current level of knowledge. It implies no guarantee of the product properties and does not justify a contractual legal relationship. This safety data sheet serves the user as reference information. Although this safety data sheet has been drawn up with great care, no guarantee for data accuracy, and no liability for the consequences of printing, typeset or transcription errors can be accepted. The existing laws, regulations and rule systems, including those not mentioned in this data sheet, must be complied with by the recipient of our products under their own responsibility.

Annex on quartz (SiO_2)

Occupational Exposure Limits in mg/m^3 8 hours TWA – Respirable dust – in EU 27[1] + Norway & Switzerland

Country/Authority (See caption p.2)	Inert dust	Quartz (q)	Cristobalite (c)	Tridymite (t)
Austria / I	6	0,15	0,15	0,15
Belgium / II	3	0,1	0,05	0,05
Bulgaria / III	4	0,07	0,07	0,07
Cyprus/ IV	/	10k/Q[2]	/	/
Czech Republic/ V		0,1	0,1	0,1
Denmark / VI	5	0,1	0,05	0,05
Estonia		0,1	0,05	0,05
Finland / VII		0,2	0,1	0,1
France / VIII		5 or 25k/Q		
France / IX	5	0,1	0,05	0,05
Germany/X	3	/[3]	/	/
Greece/XI	5	0,1	0,05	0,05
Hungary		0,15	0,1	0,15
Ireland/ XII	4	0,05	0,05	0,05
Italy/ XIII	3	0,025	0,025	0,025
Lithuania/ XIV	10	0,1	0,05	0,05
Luxembourg/ XV	6	0,15	0,15	0,15
Malta / XVI[4]	/	/	/	/
Netherlands/ XVII	5	0,075	0,075	0,075
Norway/XVIII	5	0,1	0,05	0,05
Poland		0,3	0,3	0,3
Portugal/XIX	5	0,025	0,025	0,025
Romania/XX	10	0,1	0,05	0,05
Slovakia		0,1	0,1	0,1
Slovenia		0,15	0,15	0,15
Spain/ XXI	3	0,1	0,05	0,05
Sweden/XXII	5	0,1	0,05	0,05
Switzerland/XXIII	6	0,15	0,15	0,15
United Kingdom/XXIV	4	0,1	0,1	0,1

[1] Missing information for Latvia. – To be completed.
[2] Q : quartz percentage – K=1
[3] Germany has no more OEL for quartz, cristoba lite, tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.
[4] When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

Source: NepSi http://www.nepsi.eu/agreement-good-practice-guide/occupational-exposure-limits.aspx
NepSi website http://www.nepsi.eu/

Caption

Country		Adopted by/Law denomination	OEL Name (if specific)
Austria	I	Bundesministerium für Arbeit und Soziales	Maximale ArbeitsplatzKoncentration (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 fot Arbeidstilsynet	Threshold Limit Value
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 ArbeitsplatzKoncentration (MAK)
Greece	XI	Legislation for mining activities	
Ireland	XII	2002 Code of Practice for the Safety, Health & Welfare at Work (CoP)	
Italy	XIII	Associazone 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 ArbeitsplatzKoncentration (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 NP1796:2004	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

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