



Respirable Crystalline Silica.
Preventive Action Guide.

TECHLAM®
Ceramics

LEVANTINA
THE NATURAL STONE COMPANY

Respirable Crystalline Silica. Preventive Action Guide.

INDEX

| | | |
|-----------|----------------------------------------------------------------------------------------|----|
| 1. | INTRODUCTION | 2 |
| 2. | GENERAL RISKS | 2 |
| 3. | GENERAL HANDLING AND STORAGE RECOMMENDATIONS | 6 |
| 4. | GENERAL CUTTING AND POLISHING RECOMMENDATIONS RISKS ARISING FROM CRYSTALLINE SILICA | 8 |
| 5. | RECOMMENDATIONS FOR FITTING OR FIXING PANELS. GENERAL SAFETY RECOMMENDATIONS | 13 |
| 6. | FURTHER INFORMATION AND DISCLAIMER | 14 |

Material safety data sheet

| | | |
|------------|----------------------------------------|----|
| 1. | GENERAL DESCRIPTION | 15 |
| 2. | HAZARDS IDENTIFICATION | 15 |
| 3. | COMPOSITION/INFORMATION ON INGREDIENTS | 17 |
| 4. | FIRST AID MEASURES | 18 |
| 5. | FIREFIGHTING MEASURES | 18 |
| 6. | ACCIDENTAL RELEASE MEASURES | 19 |
| 7. | HANDLING & STORAGE | 19 |
| 8. | EXPOSURE CONTROLS/PERSONAL PROTECTION | 19 |
| 9. | PHYSICAL AND CHEMICAL PROPERTIES | 23 |
| 10. | STABILITY & REACTIVITY | 24 |
| 11. | TOXICOLOGICAL INFORMATION | 24 |
| 12. | ECOLOGICAL INFORMATION | 24 |
| 13. | DISPOSAL CONSIDERATIONS | 24 |
| 14. | TRANSPORT INFORMATION | 25 |
| 15. | REGULATORY INFORMATION | 25 |
| 16. | OTHER INFORMATION | 25 |

1. INTRODUCTION

It is extremely important for Levantina to guarantee the satisfaction of our distributors, manufacturers, fitters and end users (hereinafter, customers) when using our products, and the safety of their workers during all processes.

For this reason, Levantina promotes good practice guides and guidelines for using its materials, helping our customers to improve their production processes and the health and safety conditions of their workers.

In their end state, TECHLAM® panels do not pose a risk when transported, packaged or when they are used by the end user after fitting. Just like any other existing building material, handling TECHLAM® during the assembly process can pose risks that this guide aims to identify in a general manner, so that our customers can prevent them.

The information contained in this guide is therefore aimed at our customers' workers who handle TECHLAM® during the fitting stage of installations and building work.

It is important to note that this guide does not aim to replace any legislation applicable to our distributors, manufacturers or fitters; this manual is simply a guide to help our customers meet applicable legislation, containing general recommendations and good practice.

The purpose of this guide is summarised below:







- To provide health and safety information relating to the use, storage and transformation of the panels.
- To inform and alert our customers to potential risks arising from the handling, storage and transformation of TECHLAM® panels.
- To suggest preventive measures and good practice to our customers, helping them to minimize the general risks highlighted in this guide.

2. GENERAL RISKS












TECHLAM'S final composition is not a hazardous product. It is however advisable that customers carry out a risk assessment regarding the work to be done using the material, the products that will be used and the place where the work will be done so that the panels can be used appropriately and any potential risks relating to the product or task can be minimized.

Levantina therefore recommends bearing in mind the general risks described below when handling, storing, transforming and fitting TECHLAM® panels:







HANDLING AND STORAGE

| POTENTIAL RISKS | PREVENTIVE MEASURES | RECOMMENDATIONS |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Panels may fall during handling.</p>  <p>Potential risk of postural strain.</p> | <p>It is recommended that the panels are handled by two people or mechanical lifting tools.</p> |  <p>It is recommended that safety boots are worn to minimize the risk of material falling on feet.</p> |
|  <p>Potential risk of cuts from panel edges or packing wood.</p> | <p>It is recommended that the panel edges, packing and final storage area are all checked before taking hold of panel.</p> <p>It is recommended that suction pads are used to remove panels from packing.</p> |  <p>It is recommended that protective mechanical gloves are worn to minimize the risk of cuts.</p> |
|  <p>Storage crates may fall.</p> | <p>It is recommended that storage crates are checked regularly.</p> <p>It is not advisable to stack more than two crates on top of each other.</p> | |

CUTTING OR POLISHING THE PANELS

| POTENTIAL RISKS | PREVENTIVE MEASURES | RECOMMENDATIONS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Panels may fall during handling.</p> | <p>It is recommended that the panel is fixed to the work surface to avoid accidental movement.</p> |  <p>It is recommended that safety boots are worn to minimize the risk of material falling on feet.</p> |
|  <p>Potential risk of cuts from panel edges or loose pieces.</p> | <p>It is recommended that panel edges are checked before touching them.</p> |  <p>It is recommended that protective mechanical gloves are worn to minimize the risk of cuts.</p> <p>It is recommended that appropriate clothing (aprons, overalls or similar) is worn to reduce the risk of cuts to the body.</p> |
|  <p>Potential risk of spraying.</p> | <p>It is recommended that a suitable posture is adopted to avoid coming into contact with potential spraying during cutting or polishing.</p> |  <p>It is recommended that protective anti-impact goggles are worn to minimize the risk of spraying.</p> |
|  <p>Potential risk of inhalation of harmful substances. Possible creation of dust.</p> | <p>It is recommended that wet cutting and polishing tools with internal extraction are used to minimize dust.</p> |  <p>It is recommended that a protective mask is worn to prevent the inhalation of dust at all times.</p> |
|  <p>Potential risk of noise.</p>  <p>Potential risk from using machines.</p> | <p>It is recommended that the instruction manuals of all cutting and polishing equipment are read.</p> |  <p>It is recommended that ear protection is worn during cutting and polishing.</p> <p>It is recommended that the instructions contained in the manuals for all machinery used are followed.</p> |

FITTING AND FIXING PANELS

| POTENTIAL RISKS | PREVENTIVE MEASURES | RECOMMENDATIONS |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Potential risk of inhalation of harmful substances. Grouting and fixing products.</p> | <p>It is recommended that the safety data sheet provided by the product manufacturer is read and the product used in accordance with instructions.</p> | <p>It is recommended that the personal protection equipment highlighted in the safety data sheet is used.</p> |
|  <p>Panels may fall when being handled or fitted.</p>  <p>Potential risk of postural strain.</p> | <p>It is recommended that the panels are handled by two people or mechanical lifting tools.</p> |  <p>It is recommended that safety boots are worn to minimize the risk of material falling on feet.</p> |
|  <p>Potential risk of cuts from panel edges or packing wood.</p> | <p>It is recommended that the panel edges, packing and final fitting area are all checked before taking hold of panel.</p> |  <p>It is recommended that protective mechanical gloves are worn to minimize the risk of cuts.</p> |

*This information regarding risks should never replace the risk assessment that must be carried out by all customers on the products used, the tasks carried out and the places where the work is undertaken. This information should only be taken as a guide to potential risks.

3. GENERAL HANDLING AND STORAGE RECOMMENDATIONS:

To minimise potential risks associated with the handling and storage of TECHLAM®, Levantina recommends that the instructions below are taken into consideration:



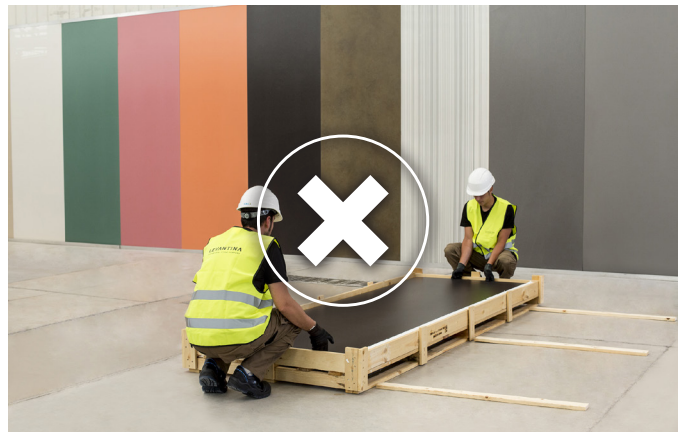
YES Lift the crate containing the panels from the longest side.



NO Do not try to lift the crate containing the panels from the shortest side.



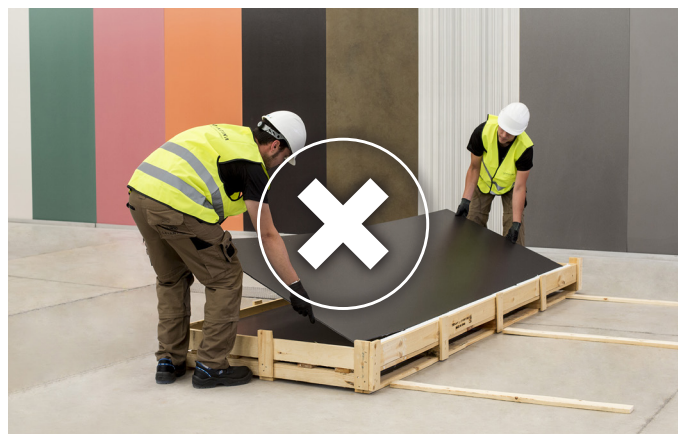
YES TECHLAM® 3x1m panels should be removed from the crate by two people positioned side by side.



NO When removing panels from the crate, you should not be facing your colleague.



YES Support the panel using both hands and lift it slowly. Both you and your colleague should do this at the same time.



NO Do not lift the panel from the corners.



YES When the panel is vertical, lift it and keep it straight at all times.



NO Do not carry or transport the panel horizontally.



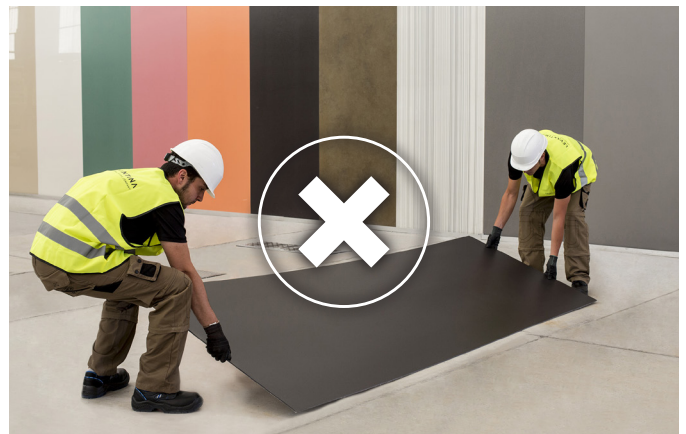
YES Position both protectors before resting the panel on the floor.



NO Do not rest the panel on the floor without the protectors.



YES Spread your arms to cover as much surface area as possible and gently rest the panel on the floor.



NO Do not hold the panel by the corners when lowering it to the floor.



SI

Always use the protectors when leaning the panels against any surface. Rest the panel at an angle to prevent it from falling.



NO

Do not rest the panel against any surface without using protectors.



The crates may vary in size depending on the panel's format, but they should always be used and handled in the same way.

There are no specific conditions to ensure safe storage, except that panels should be stored in an appropriate closed and covered area and no more than two crates should be stacked on top of each other.

Avoid heavy impacts that may cause the material to break and keep the storage and handling areas clean and tidy to minimise the possibility of the panels banging into other objects.

4.

GENERAL CUTTING AND POLISHING RECOMMENDATIONS - RISKS ARISING FROM CRYSTALLINE SILICA:

TECHLAM® contains 10-15% crystalline silica in its final compact composition. TECHLAM® panels and related products do not however pose an inhalation risk when stored, transported or when they are used by the end user.

The dust containing free silica particles (SiO_2) may only be produced when cutting or polishing TECHLAM®.

Therefore it is only when cutting or polishing the panels that dust may be generated and only a small fraction of this respirable dust contains free silica, posing a risk to human health.

For this reason, in order to avoid the risk of free silica particles (SiO₂) when cutting and polishing the panels, the material's label includes the following information in accordance with CLP Regulation EC No1272/2008:



Hazard pictogram

Generally speaking, silica is a basic component of soil, sand, granite, marble and many other minerals. There are different types of silica: crystalline and amorphous. Quartz is the most common form of crystalline silica and cristobalite and tridymite are two other, more harmful, forms of crystalline silica. Amorphous silica is considered to be of low toxicity.

When materials whose internal composition contains crystalline silica are made, cut or polished, dust is created in the working environment that may be breathed in by workers.

This fraction of respirable dust can enter the lungs and, following prolonged exposure to high levels of this material without protection or controls, it may result in irreversible damage to a worker's health, causing diseases such as silicosis, lung cancer, fibrosis of the lungs, tuberculosis, liver disease, eye abrasion and irritated skin and eyes.

If a worker already suffers from some kind of illness, exposure to silica dust may make symptoms worse.

This is why we recommend that customers who sell TECHLAM®, or those that fit the material directly themselves, inform their workers of the potential risks of being exposed to crystalline silica when polishing or cutting the material.

The information below contains details of acceptable levels of exposure to silica dust and further general information:

- Exposure limits and information about crystalline silica: <http://www.ima-europe.eu/about-industrial-minerals/industrial-minerals-ima-europe/silica>
- General information about silica: <http://www.eurosil.eu/silica-and-health>
- Requirements for the European Network for Silica: <http://www.nepsi.eu/agreement-good-practice-guide/good-practice-guide.aspx>
- US legislation:
 - Occupational Safety & Health Administration (OSHA): <https://www.osha.gov/>
 - American Conference of Governmental Industrial Hygienist (ACGIH): www.acgih.org/
 - Industrial Minerals Association - North America: www.ima-na.org/
 - Marble Institute of America: <https://www.marble-institute.com/index.cfm>
- Brazilian employment legislation: <http://portal.mte.gov.br/portal-mte/>

The information below provides guidelines on the exposure limits in different countries:

Spain:

Spanish Royal Decree 374/2001 and the Complementary Technical Instructions (ITC in its Spanish acronym) regulate exposure and operational and preventive measures when there is free silica in the working environment and refer to the following limits:

Environmental Limit Value-Daily Exposure - Respirable dust fraction (fr): 3 mg/m³
 Environmental Limit Value-Daily Exposure - Free silica (quartz) in fr: 0,1 mg/m³
 *Environmental Limit Value-Daily Exposure - Cristobalite in fr: 0,05 mg/m³

In the **European Union**:

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

| Country/Authority (see caption p. 2) | Non specified (inert) dust | Quartz | Cristobalite | Tridymite |
|-----------------------------------------|----------------------------------|--------------------|--------------|-----------|
| Austria/I | 6 | 0,15 | 0,15 | 0,15 |
| Belgium/II | 3 | 0,10 | 0,05 | 0,05 |
| Bulgaria/III | 4 | 0,07 | 0,07 | 0,07 |
| Czech Republic/IV | | 0,10 | 0,10 | 0,1 |
| Cyprus/V | / | 10k/Q ² | / | / |
| 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 |
| Malta⁴/XVI | / | / | / | / |
| 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 |
| UK/XXIV | 4 | 0,1 | 0,1 | 0,1 |

1. Missing information for Latvia – To be completed.

3. Germany has no more OEL for quartz, cristobalite and tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures

2. Q: quartz percentage – K=1

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

| 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 Del Lietuvos higienos normos HN 23:2001 | Ilgalaikio poveikio ribine verte (IPRV) |
| Luxembourg | XV 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/oel_database.aspx |
| Norway | XVIII Direktoratet for Arbejdstilsynet | 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) |

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

USA:

| | |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUBSTANCE | Respirable crystalline silica: quartz, cristobalite and tridymite |
| OSHA PEL | Total dust 30 mg/m ³ 1 % SiO ₂ +2 Respirable dust (10 mg/m ³ / %SiO ₂ +2 during 8 working hours of exposure to the substance (TWA) |
| ACGH TLV | 0,025 mg/m ³ (8 h) (TWA) |
| ADOPTED BY/LAW DENOMINATION | Occupational Safety & Health Administration (OSHA) / American Conference of Governmental Industrial Hygienist (ACGIH) |
| OEL NAME (IF SPECIFIC) | Permissible exposure level (PEL) / Threshold limit value (TLV) |

Brazil:

| SUBSTANCE | SÍLICA LIVRE CRISTALIZADA (Incluído pela Portaria DNSST n.º 08, de 05 de outubro de 1992) | | | | | | | | | | | | |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------|--------------------|----|-----|----|-----|----|-----|----|------|----------|
| SUMMARY OF LEGISLATION | <p>1. O limite de tolerância, expresso em milhões de partículas por decímetro cúbico, é dado pela seguinte fórmula:</p> $L.T = \frac{8,5}{(\% \text{ quartzo} + 10)} \text{ mppdc (milhões de partículas por decímetro cúbico)}$ <p>Esta fórmula é válida para amostras tomadas com impactador (impinger) no nível da zona respiratória e contadas pela técnica de campo claro. A percentagem de quartzo é a quantidade determinada através de amostras em suspensão aérea.</p> <p>2. O limite de tolerância para poeira respirável, expresso em mg/m³, é dado pela seguinte fórmula:</p> $L.T = \frac{8}{(\% \text{ quartzo} + 10)} \text{ mg/m}^3$ <p>3. Tanto a concentração como a percentagem do quartzo, para a aplicação deste limite, devem ser determinadas a partir da porção que passa por um seletor com as características do Quadro n.º 1.</p> <table border="1" data-bbox="625 1440 1378 1664"> <thead> <tr> <th>Diâmetro Aerodinâmico [um] (esfera de densidade unitária)</th> <th>% de passagem pelo seletor</th> </tr> </thead> <tbody> <tr> <td>menor ou igual a 2</td> <td>90</td> </tr> <tr> <td>2,5</td> <td>75</td> </tr> <tr> <td>3,5</td> <td>50</td> </tr> <tr> <td>5,0</td> <td>25</td> </tr> <tr> <td>10,0</td> <td>0 (zero)</td> </tr> </tbody> </table> <p>4. O limite de tolerância para poeira total (respirável e não -respirável), expresso em mg/m³, é dado pela seguinte fórmula:</p> $L.T = \frac{24}{(\% \text{ quartzo} + 3)} \text{ mg/m}^3$ <p>5. Sempre será entendido que “Quartzo” significa sílica livre cristalizada.</p> | Diâmetro Aerodinâmico [um] (esfera de densidade unitária) | % de passagem pelo seletor | menor ou igual a 2 | 90 | 2,5 | 75 | 3,5 | 50 | 5,0 | 25 | 10,0 | 0 (zero) |
| Diâmetro Aerodinâmico [um] (esfera de densidade unitária) | % de passagem pelo seletor | | | | | | | | | | | | |
| menor ou igual a 2 | 90 | | | | | | | | | | | | |
| 2,5 | 75 | | | | | | | | | | | | |
| 3,5 | 50 | | | | | | | | | | | | |
| 5,0 | 25 | | | | | | | | | | | | |
| 10,0 | 0 (zero) | | | | | | | | | | | | |
| FURTHER LEGISLATION | NR 15 - ATIVIDADES E OPERAÇÕES INSALUBRES ANEXO N.º 12 LIMITES DE TOLERÂNCIA PARA POEIRAS MINERAIS | | | | | | | | | | | | |

*For further information go to: <http://portal.mte.gov.br/portal-mte/>

Notwithstanding the preventive measures, regular checks and measurements that should be carried out by our customers when cutting or polishing TECHLAM®, Levantina recommends that the following indications, based on NEPSI's good practice guidelines, are taken into consideration:

Tools:

- Consider using wet tools.
- Set up specific extraction or forced ventilation systems in the work place. Do not breathe dust created when cutting or polishing the material.

PPEs and work clothing:

- Point out the obligatory use of the following PPEs when cutting or polishing:
 - a) Respiratory protection equipment or mask for P3 particles.
 - b) Anti-impact goggles.
 - c) Mechanical protection gloves.
 - d) Specific work clothing for the task in question.

Personal hygiene:

- Recommend that workers wash their hands and faces with plenty of water after cutting or polishing the panels.
- Do not eat, drink or smoke when cutting or polishing the material.
- Clean any clothing used during the process once the job is completed.

Regular health checks and controls:

- Regular hygiene assessments should be carried out to ensure that concentration levels of the respirable dust fraction and crystalline silica dust are below the limits established for each country and that prevention and control measures are effective. For lengthy jobs, it is recommended that a measuring and supervision programme is set up in relation to the cutting and polishing of TECHLAM®.
- Specific medical check-ups should be offered to workers exposed to crystalline silica, applying the medical protocols established by occupational health specialists.

Cleanliness and organisation:

- Once a job has been finished, it is recommended that dust absorption measures are used to clean the work area. Avoid dry methods (i.e. sweeping, etc.)

Workers' training and information:

- Workers must receive up-to-date training and information about the potential risks of their job.

5. RECOMMENDATIONS FOR FITTING OR FIXING PANELS.

GENERAL SAFETY RECOMMENDATIONS:

Finally, Levantina is committed to providing a safe working environment for our workers and colleagues. We therefore recommend that our distributors, manufacturers and fitters take into consideration the following general safety recommendations and general good practice when fitting or fixing panels:

Work space:

- It is a good idea to keep the work space clean and tidy.
- Avoid having unnecessary tools in the work space and keep the required tools tidy.
- Work spaces should be kept dry, well ventilated and should have adequate lighting.

- It is good practice to keep the work space closed off, so that unauthorised persons are not accidentally affected (i.e. visitors, customers, etc.)

Ergonomics :

- Work surfaces should be stable to avoid the piece being handled from falling and to prevent postural strain.
- Avoid sudden or repetitive movements. Use adequate mechanical equipment to transport or lift loads.
- Use clamps or hoists when required, freeing up your hands to use tools safely.

Equipment and tools:

- Use appropriate equipment and tools. Do not use equipment and tools that are not designed for the job in question. It is bad practice to improvise with inappropriate equipment or tools.
- Read the instruction manuals for the equipment and tools you are going to use.
- Before using a piece of equipment, ensure that you are trained and authorised to use it.
- Only use equipment and tools in accordance with the instruction manual; follow the instructions, restrictions and advice contained in the manual.
- Consider the potential risks of using a piece of equipment or tool.
- Equipment and tools should be maintained in accordance with the instruction manual.
- All electrical appliances must be connected to an earthed cable.
- Ensure that equipment and tools are switched off when you plug them in.
- Do not wear loose clothing, ties, rings, bracelets, etc., that could get caught up in machinery.

Chemical products for grouting and fixing:

- Get hold of the safety files for the complementary chemical products used to fix TECHLAM®. Follow the manufacturer's recommendations and use the personal protection equipment highlighted in the safety data sheet.

First aid and emergencies:

- There should be a full first aid box in the work space and an up-to-date list of emergency telephone numbers.

6. FURTHER INFORMATION AND DISCLAIMER

The information contained in this document is, to the best of our knowledge, true and correct..

This document is a general summary and does not cover all risks that may arise in a working environment. The document is therefore informative and contains good practice recommendations.

Nothing of the contents of these guidelines may be interpreted as a recommendation for using TECHLAM® to breach any kind of legislation, best safety practice or other applicable regulation. It is the responsibility of the recipient of our product to observe the relevant regulations and legislation.

We recommend that you check with your Occupational Health and Safety Department or other accredited expert if you have any doubts regarding the potential risks surrounding your job.

The legislation regulating silica dust sets out different exposure limits for each country and we recommend that you check and assess the local legislation applicable in each case. For further information, refer to the document titled “Information on exposure to crystalline silica” (Información sobre exposición a sílice cristalina) published by Levantina y Asociados de Minerales S.A.U., available on <http://www.levantina.com/es/documentacion>

For more information, you can also go to the “Good practice guide for workers health protection through the good handling and use of crystalline silica and products containing it” published by NEPSI on the following website: <http://www.nepsi.eu/agreement-good-practice-guide/good-practice-guide.aspx>

MATERIAL SAFETY DATA SHEET

1. GENERAL DESCRIPTION

TECHLAM® is a compact ceramic tile that comes in different sizes and thicknesses and is used as an indoor and outdoor surface material for construction and decorative purposes.

1.1. Product identifier:

Commercial name: TECHLAM®
EC or CAS numbers: N/A
Register number: N/A
Other names: N/A

1.2. Identified uses of the substance/mixture and uses advised against:

This product's main applications are as a surface covering or decorative element.
When cutting or polishing the tiles, it is advisable to use measures to reduce exposure to the dust produced, as it may contain free silica particles (SiO₂).

1.3. Company name:

Name: LEVANTINA Y ASOCIADOS MINERALES S.A.U.
Address: CORPORATE HEADQUARTERS: Autovía Madrid - Alicante s/n 03660 Novelda (Alicante) SPAIN
Tel: +34 965609184 & Fax: +34 965609109
Email: info@levantina.com or techlam@levantina.es
Website and information: www.levantina.com

1.4. Emergency telephone number:

Emergency telephone number: toxicology and medical hotline: +34 902 300 255
(Product composition is included in point 3)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance:

In its final compact format, the product does not meet the criteria required to classify it as hazardous, as defined in CLP Regulation (EC) No 1272/2008 and in Directive 67/548/EEC. The product therefore does not pose any danger to human health or the environment.

It is important to note that when cutting or polishing this product, dust containing free silica particles (SiO₂) may be produced. It is only in this state, when the silica forms part of the respirable fraction, that it poses a risk to human health.

TECHLAM® contains 10-15% crystalline silica in its final compact composition.

2.2. Label elements

In order to avoid the risk of free silica (SiO₂) particles when cutting and polishing the tiles, the material's label includes the following information in accordance with CLP Regulation EC No1272/2008:



HAZARD PICTOGRAM. Signal word: Danger

HAZARD STATEMENT

CLP Regulation EC No 1272/2008. Crystalline silica dust



GHS08

H 372: Causes damage to the lungs through prolonged or repeated exposure: inhalation

PRECAUTIONARY STATEMENT

CLP Regulation EC No 1272/2008. Crystalline silica dust. Precautionary statement



P260: Do not breathe dust created when cutting, drilling or polishing the material.

P264: Wash hands and face thoroughly after handling



P270: Do not eat, drink or smoke when using this product

P280: Wear protective gloves, protective clothing and eye protection



P284: Wear respiratory protection for P3 particles

P314: Get medical advice/attention if you feel unwell

P501: Dispose of contents in accordance with local regulations

2.3. Other hazards

When cutting or polishing TECHLAM® tiles, the following risks should be considered due to the potential presence of free silica (SiO₂) particles:

- 1. Risk to eyes:** the dust and particles created when cutting may cause irritation and damage.
- 2. Risk to skin:** the dust created may rarely cause irritation to the skin.
- 3. Risk if inhaled:** the dust created may irritate the respiratory system, nose, throat and lungs.
- 4. Risk if swallowed:** not considered a potential health risk if swallowed. The dust may cause gastrointestinal irritation if the particles are swallowed.
- 5. Risk due to chronic exposure:** adverse health affects due to prolonged exposure to silica dust may cause chronic and irreversible effects (silicosis, pneumoconiosis, emphysema, bronchitis, cancer).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name of final product: TECHLAM®. This product is sold in a solid format as compact tiles of different sizes and thicknesses.

SUMMARY OF PRODUCT COMPOSITION

| SUBSTANCES CONTAINED IN THE PRODUCT | CAS NUMBER | CHEMICAL COMPOSITION | HAZARDOUS COMPONENTS |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Atomised porcelain tiles | 14808-60-7 (SiO ₂) 1344-28-1 (Al ₂ O ₃) 1317-60-8 (Fe ₂ O ₃) 13463-67-7 (TiO ₂) | SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , TiO ₂ (alkaline), RO (alkaline-earth) | Does not contain substances classified as hazardous according to the criteria of Directives 67/548/EEC and 99/45/EC |
| Fibreglass | 65997-17-3 | Continuous filaments SiO ₂ | Does not contain hazardous substances according to Directives 67/548/EEC and 99/45/EC and the most recent amendments. |
| Dual-component polyurethane adhesive; does not contain solvents | | Mixture using organic substances | None of the substances contained in the mixture exceeds the values set in ANNEX II of Regulation (EC) number 1907/2006. |
| Interlacing agent for polyurethane adhesives with or without solvents | 9016-87-9 | Isocyanate NCO (31,5%) | In accordance with ANNEX II of Regulation (EC) number 1907/2006 (point 3.2.) the mixture contains the following hazardous substances: Methylene diphenyl diisocyanate, isomers/homologues |

CHEMICAL ANALYSIS OF THE PRODUCT

| CRYSTALLINE SILICA | | | AMORPHOUS SILICA | | | K-FELDSPAR | | PLAGIOCLASE | |
|--------------------|--------------------------------|--------------------------------|------------------|-------------------|------------------|------------|------|-------------|--|
| 15,1 | | | 51,7 | | | 0,3 | | 2,1 | |
| SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | TiO ₂ | Na ₂ O | K ₂ O | CaO | MgO | Fibreglass | |
| 69,2 | 17,1 | 0,5 | 0,8 | 6,4 | 1,42 | 0,8 | 0,17 | 0,35 | |

*Free of cristobalite

4. FIRST AID MEASURES

4.1. Description of first aid measures

General advice: The edges of compact TECHLAM® tiles may cause cuts to the skin, so gloves should be worn when handling. The back part of TECHLAM® tiles may contain dust from the glaze used during manufacturing, so protective gloves should be worn to avoid direct contact with this waste.

When cutting or polishing the tiles, contact may be made with dust that contains free silica particles. Only in this particular case should the following recommendations be followed:

General advice: contact with silica dust does not require urgent medical advice.

If in eyes: wash immediately with plenty of water for 15 minutes. If adverse effects are observed, seek medical advice.

If on skin: wash the skin with soap and water. Remove all clothing exposed to the dust, making sure that the clothing does not come into contact with eyes. If adverse effects are observed, seek medical advice.

If inhaled: take the affected person to a well ventilated area where there is fresh air. Apply assisted breathing techniques if the injured person has a serious reaction. If adverse effects are observed, seek medical advice.

If swallowed: if the dust is swallowed, seek medical advice.

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

Compact TECHLAM® tiles do not cause known secondary effects or symptoms.

When cutting or polishing the tiles, the dust containing free silica particles may penetrate deep down into the lungs and, following prolonged exposure to high levels of this agent, may cause irreversible health effects, including pneumoconiosis such as silicosis or the worsening of other lung diseases.

4.3. Indication of any immediate medical attention and special treatment required

If swallowed, seek medical advice.

5. FIREFIGHTING MEASURES

TECHLAM® tiles are a NON FLAMMABLE product and in terms of fire resistance they are classified as Category B (Production of smoke and release of drops and particles)

5.1. Extinguishing media:

Water and carbon dioxide; depending on location of fire. Use appropriate media in accordance with environment.

5.2. Extinguishing media NOT to be used:

There are no known incompatible extinguishing media.

5.3 Special risks:

No special risks other than those listed in category B have been recorded in relation to this product catching fire.

5.4. Protection equipment:

Use standard fire protection equipment for fires involving category B materials.

6. ACCIDENTAL RELEASE MEASURES

TECHLAM® tiles do not generate spillage, except during cutting and polishing when loose pieces of material or dust may be released. Only in this specific case should the following recommendations to dispose of the waste created be followed:

6.1. Personal precautions:

Use safety shoes, protective gloves and eyewear and respiratory protection equipment when removing and cleaning waste.
Wash hands with soap after handling the material and before eating, drinking, smoking and using the toilet.

6.2. Environmental precautions:

It is specifically recommended that water-cooled tools are used and that any dry cuts, grinding, products or other treatments are made or used in an appropriately ventilated location. This will prevent the build-up of dusty environments.

6.3. Methods and material for containment and cleaning up:

In accordance with the relevant laws and regulations, waste pieces of tiles and the dust produced may be disposed of in containers for inert waste.

7. HANDLING & STORAGE

7.1. Precautions for safe handling:

Wherever possible, avoid the creation of dust in the air while working with TECHLAM® tiles. If the tiles need to be cut or polished, it is a good idea to install a suitable dust control system or to provide workers with adequate respiratory protection equipment.

When handling the tiles manually, it is recommended that gloves are used to provide protection from residual dust and rough edges. Avoid excessive physical strain when handling the tiles.

7.2. Conditions for safe storage:

It is recommended that the tiles are stored in a suitably closed and covered place. Avoid heavy impact that may cause the material to break.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Dust containing free silica (SiO₂) particles may only be produced when cutting or polishing the compact TECHLAM® tiles. The following points relate to controlling this substance:

8.1. Control parameters – exposure limits to dust generated when cutting or polishing

Spain:

Spanish Royal Decree 374/2001 and the Complementary Technical Instructions (ITC in its Spanish acronym) regulate exposure and operational and preventive measures when there is free silica in the working environment and refer to the following limits:

Environmental Limit Value-Daily Exposure - Respirable dust fraction (fr): 3 mg/m³
Environmental Limit Value-Daily Exposure – Free silica (quartz) in fr: 0,1 mg/m³
*Environmental Limit Value-Daily Exposure – Cristobalite in fr: 0,05 mg/m³

Europe:

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

| Country/Authority (see caption p. 2) | Non specified (inert) dust | Quartz | Cristobalite | Tridymite |
|-----------------------------------------|----------------------------------|--------------------|--------------|-----------|
| Austria/I | 6 | 0,15 | 0,15 | 0,15 |
| Belgium/II | 3 | 0,10 | 0,05 | 0,05 |
| Bulgaria/III | 4 | 0,07 | 0,07 | 0,07 |
| Czech Republic/IV | | 0,10 | 0,10 | 0,1 |
| Cyprus/V | / | 10k/Q ² | / | / |
| 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 |
| Malta⁴/ XVI | / | / | / | / |
| 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 |
| UK/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, cristobalite and 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.

| 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 | Del Lietuvos higienos normos HN 23:2001 | Ilgalaikio poveikio ribine verte (IPRV) |
| Luxembourg | XV | 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/oel_database.aspx |
| Norway | XVIII | Direktoratet for Arbejdstilsynet | 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) |

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

USA:

| | |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SUBSTANCE | Respirable crystalline silica: quartz, cristobalite and tridymite |
| OSHA PEL | Total dust 30 mg/m ³ 1 % SiO ₂ +2 Respirable dust (10 mg/m ³ / %SiO ₂ +2 during 8 working hours of exposure to the substance (TWA) |
| ACGH TLV | 0,025 mg/m ³ (8 h) (TWA) |
| ADOPTED BY/LAW DENOMINATION | Occupational Safety & Health Administration (OSHA) / American Conference of Governmental Industrial Hygienist (ACGIH) |
| OEL NAME (IF SPECIFIC) | Permissible exposure level (PEL) / Threshold limit value (TLV) |

Brazil:

| SUBSTANCE | SÍLICA LIVRE CRISTALIZADA (Incluído pela Portaria DNSST n.º 08, de 05 de outubro de 1992) | | | | | | | | | | | | |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------|--------------------|----|-----|----|-----|----|-----|----|------|----------|
| SUMMARY OF LEGISLATION | <p>1. O limite de tolerância, expresso em milhões de partículas por decímetro cúbico, é dado pela seguinte fórmula:</p> $L.T = \frac{8,5}{(\% \text{ quartzo} + 10)} \text{ mppdc (milhões de partículas por decímetro cúbico)}$ <p>Esta fórmula é válida para amostras tomadas com impactador (impinger) no nível da zona respiratória e contadas pela técnica de campo claro. A percentagem de quartzo é a quantidade determinada através de amostras em suspensão aérea.</p> <p>2. O limite de tolerância para poeira respirável, expresso em mg/m³, é dado pela seguinte fórmula:</p> $L.T = \frac{8}{(\% \text{ quartzo} + 10)} \text{ mg/m}^3$ <p>3. Tanto a concentração como a percentagem do quartzo, para a aplicação deste limite, devem ser determinadas a partir da porção que passa por um seletor com as características do Quadro n.º 1.</p> <table border="1" data-bbox="609 1438 1361 1662"> <thead> <tr> <th>Diâmetro Aerodinâmico (µm) (esfera de densidade unitária)</th> <th>% de passagem pelo seletor</th> </tr> </thead> <tbody> <tr> <td>menor ou igual a 2</td> <td>90</td> </tr> <tr> <td>2,5</td> <td>75</td> </tr> <tr> <td>3,5</td> <td>50</td> </tr> <tr> <td>5,0</td> <td>25</td> </tr> <tr> <td>10,0</td> <td>0 (zero)</td> </tr> </tbody> </table> <p>4. O limite de tolerância para poeira total (respirável e não -respirável), expresso em mg/m³, é dado pela seguinte fórmula:</p> $L.T = \frac{24}{(\% \text{ quartzo} + 3)} \text{ mg/m}^3$ <p>5. Sempre será entendido que “Quartzo” significa sílica livre cristalizada.</p> | Diâmetro Aerodinâmico (µm) (esfera de densidade unitária) | % de passagem pelo seletor | menor ou igual a 2 | 90 | 2,5 | 75 | 3,5 | 50 | 5,0 | 25 | 10,0 | 0 (zero) |
| Diâmetro Aerodinâmico (µm) (esfera de densidade unitária) | % de passagem pelo seletor | | | | | | | | | | | | |
| menor ou igual a 2 | 90 | | | | | | | | | | | | |
| 2,5 | 75 | | | | | | | | | | | | |
| 3,5 | 50 | | | | | | | | | | | | |
| 5,0 | 25 | | | | | | | | | | | | |
| 10,0 | 0 (zero) | | | | | | | | | | | | |
| FURTHER LEGISLATION | NR 15 - ATIVIDADES E OPERAÇÕES INSALUBRES ANEXO N.º 12 LIMITES DE TOLERÂNCIA PARA POEIRAS MINERAIS | | | | | | | | | | | | |

*For further information go to: <http://portal.mte.gov.br/portal-mte/>

8.2. Exposure controls -technical protection measures against dust generated during cutting and polishing:

Exposure to dust generated when polishing or cutting TECHLAM® tiles must initially be controlled and minimized using group and individual protection measures. Exposure control is carried out in the following way:

1. Ventilation systems: forced ventilation system and air filter.
2. Equipment: wet machinery and tools.
3. Cleaning and maintenance: suction cleaning systems, avoiding brushing or the use of compressed air which can cause a dusty environment. Preventive installation maintenance programmes that correct potential wear and tear and the release of dust into the working environment.

It is recommended that wet working methods are used when preparing and fixing the material.

8.3. Individual hygiene measures against dust generated during cutting and polishing:

1. Respiratory protection. Personal respiratory protection for type P3 particles according to regulation EN 143:2001 and amendments EN 143/AC 2002 and EN 143/AC 2005, including working with water to reduce dust during product preparation.
2. Hand protection. Protective gloves are not required, although they are recommended to avoid cuts when handling the material. Wash hands with soap and water to remove dust before breaks and at the end of a shift.
3. Eye protection. It is recommended that protective goggles are worn, according to regulation EN166:2001.
4. Skin protection. No skin protection is required..

8.4. Environmental exposure controls:

Comply with current local legislation on environmental protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Below are the physical and chemical properties of the compact TECHLAM® tile:

9.1. General information:

Aspect: Solid
Smell: Odourless
Colour: As per commercial range
Relative density: 8.1Kg/m₂
Solubility in water: Insoluble

9.2 Other information:

There is no further relevant information.

10. STABILITY & REACTIVITY

10.1. Conditions to avoid:

Avoid heavy impact that may cause the material to break.

10.2. Materials to avoid:

Hydrofluoric acid (HF). This product reacts to hydrofluoric acid by decomposing SiO₂ into silicon tetrafluoride (which is a corrosive gas) and water, damaging the surface of the product.

10.3. Hazardous decomposition products:

Idem point 10.2.

10.4. Additional information:

Inalterable colours: as the material does not contain organic pigments, it is resistant to UV radiation and the harshest weather conditions.

11. TOXICOLOGICAL INFORMATION

No relevant toxicological effects have been detected in TECHLAM® tiles.

The dust generated when cutting or polishing TECHLAM® tiles may contain free silica particles (SiO₂). Massive and/or prolonged inhalation of crystalline silica may cause lung fibrosis, pneumoconiosis, such as silicosis, and a worsening of other lung diseases (bronchitis, emphysema, etc.). The main symptom of silicosis is loss of lung capacity. People suffering from silicosis are at greater risk of developing lung cancer.

12. ECOLOGICAL INFORMATION

TECHLAM® tiles do not generate any substances that are harmful to the environment.

TECHLAM® has been awarded the GREENGUARD certificate by the US Green Building Council. This certifies that the product does not generate any substances that are harmful to the environment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

The Spanish environmental regulations listed below are used as a reference:

Law 10/98 on waste

Royal Decree 1481/2001 on the removal of waste using landfill sites

ITR (technical waste regulation) 01.0.04 on decorative stone waste

Decree 174/2005 on manager and producer duties

TECHLAM® waste may be disposed of according to the regulations:

- Delivery to an authorised waste manager
- Use of inert waste in geotechnical investigations
- Use of inert waste as quarry restoration material
- Use of inert waste as secondary raw material
- Disposed of in container for inert waste.

13.2. Packing disposal:

TECHLAM® packing materials will be disposed of according to national regulations. Generally speaking, this packing will be placed in recycling containers for wood, plastic or paper, depending on whether or not it can be recycled.

14. TRANSPORT INFORMATION

Non-hazardous product according to the land, sea and air transport regulations.

| | |
|-------------------------|-------------------------------|
| UN number | Not allocated |
| Packing group | None |
| Road and rail transport | Unlimited - ADR/RID - TPC/TPF |
| Sea transport | Unlimited - IMDG/IMO |
| Air transport | Unlimited - ICAO/IATA |

15. REGULATORY INFORMATION

Compact TECHLAM® tiles are not classified as a hazardous substance and do not pose a health risk according to CLP Regulation EC 1272/2008.

This Material Safety Data Sheet (MSDS) complies with CLP Regulation EC N°1272/2008.

16. OTHER INFORMATION

We recommend that you contact LEVANTINA Y ASOCIADOS MINERALES S.A.U. before using or supplying the product for any type of application other than those mentioned above.

The information contained in this document is, to the best of our knowledge, true and correct.

No part of the content of this sheet may be interpreted as a recommendation to use any product to breach safety practice and regulations. It is the responsibility of the recipient of our product to observe the relevant regulations and standards.

Users are responsible for carrying out a risk assessment of the product, in accordance with risk prevention regulations.

For further information, refer to the document titled "Information on exposure to crystalline silica" (Información sobre exposición a sílice cristalina) published by Levantina y Asociados de Minerales S.A.U.

More information can be found in the "Good Practice Guide For Workers Health Protection Through The Good Handling And Use Of Crystalline Silica And Products Containing It" published by NEPSI on the following website: www.nepsi.eu

Autovía Madrid-Alicante, s/n
03660 Novelda (Alicante), Spain
t +34 965 60 91 84
f +34 965 60 91 09

www.levantina.com
info@levantina.com

LEVANTINA
THE NATURAL STONE COMPANY