TECHLAM 6, 12 y 20 mm

Material Safety Data Sheet

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1. GENERAL DESCRIPTION

TECHLAM is a compact ceramic tile 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).
Do not fabricate the product by using dry processes which generate dust. In case of this use, please carefully read this material safety data sheet (MSDS); this document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

1.3. Company name distributor:

Name: Levantina Group (LEVANTINA TECHLAM S.L.U. / LEVANTINA DISTRIBUCIÓN PROPIA, S.L.U. /
Address: CORPORATE HEADQUARTERS: Autovía Madrid - Alicante s/n 03660 Novelda (Alicante) SPAIN
Tel: +34 965609184 & Fax: +34 965609109
Email: info@levantina.com ; techlam@levantina.com
Website and information: www.levantina.com

1.4. Emergency telephone number:

OSHA phone number 800-321-6742 (OSHA)
Product composition is included in point 3.

2.
HAZARD 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 <1-23% Crystalline silica.

2.2. Label elements

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 Regulation EC nº1272 / 2008 CLP / GHS ver. 7:

GHS Label, Hazards and Precautionary Statements:

•GHS Pictogram:

- Signal word: Danger
- Hazard statements:
    - o H350i: May cause cancer by inhalation.
    - o H335: May Cause respiratory irritation.
    - o H372: Causes damage to organs (lung) through prolonged or repeated exposure (via inhalation).

• Precautionary statement:

CRYSTALLINE SILICA DUST	
	**P201:** Obtain special instructions before use.
	P202: Do not handle until all safety precautions have been read and understood.
	P260: Do not breathe dust generated in the cutting, grinding and polishing processes.
	P264: Wash face and hands thoroughly after handling.
	P270: Do not eat, drink, or smoke when dust is being produced.
	P280: Wear protective gloves/protective clothing/ eye protection/face protection.
	P284: Wear respiratory protection for particles (min. P3 recommended) when dust is being produced.
	P314: Get medical advice/attention if you feel unwell.
	P501: E 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 may cause irritation and damage.
2. **Risk to skin:** The dust created may cause irritation to the skin.
3. **Risk if inhaled:** The dust created may irritate the respiratory system, nose,throat, and lungs.
4. **Risk if ingested:** Not considered a potential health risk if there is ingestion. The dust may cause gastro-intestinal irritation if the particles are ingested.
5. **Risk due to chronic exposure:** Adverse health effects due to prolonged exposure to silica dust may cause chronic and irreversible effects (silicosis, pneumoconiosis, emphysema, bronchitis, cancer).

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Subsntances and Mixtures

RAW MATERIALS	N-CAS	RANGE %
BALL CLAY	999999-99-4	5-25%
KAOLIN	1332-58-7	5-25%
TALC	14807-96-6	5-10%
FLUX RAW MATERIALS	68476-25-5	0-50%
DEGREASING RAW MATERIALS	14808-60-7	0-20%
BLEACHING	14940-68-2 / 1344-28-1	0-10%
PIGMENTS	1317-61-9 / 147-14-8	0-5%
RESIDUE	-	0-30%

3.2. Additional ingredient information

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

Substances that make up the mixture and represent a danger to health or the environment according to Regulation (EC) No. 1272/2008:

SUBSTANCES CONTAINED IN THE PRODUCT	CAS NUMBER	CHEMICAL COMPOSITION	HAZARDOYS COMPONENTS
Atomised porcelain tiles (Contains Crystalline silica (SiO2): Quartz	14808-60-7 (SiO2)	<1 -23% Crystalline silica	STOT RE 1, H372 STOT SE 3, H335 Canc. 1A, H350i

BASE COLOR	MODEL	% QUARTZ
Ultra White Base	Calacatta white, bellagio, macchia gold, montblanc, essential gold, tropical green, artico, nuvola, forest.	<1 %
Traslucent Base	Patagonia, onyx serena, colorado, onyx dark, onyx dalia.	<2 %
White Base	Calacatta white, bellagio, montblanc, essential gold, tropical green, artico, aria, forest, onyx dalia.	17 %
Color Base	Thar, quartzite stone, legno, limestone, coralina, colossal cream, travertino pearl, patagonia, onyx serena, colorado, tesa, basic ice, kalos bianco, marvel gold, crystallo, bianco lasa, kaledonia.	21 %
Black Base	Tambora, ferox, fior di bosco, reggio concerto, blackfalls, ardesia nero, pierre blue, basic black, st laurent, basalt black, rust iron, cosmopolitan black, onyx dark, starlight	23 %

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.

It is only when TECHLAM is being cut, polished, ground or removed, the following recommendations must be followed:

General advice: Contact with silica dust does not require urgent medical support
Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes if dust gets in eyes. Get medical attention if irritation persists.
Skin: Wash thoroughly after working with TECHLAM. 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 support.
Inhaled: Take the person affected 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 support.
Ingestion: If the dust is ingested, seek medical support.

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 tratment required.

In case of TECHLAM dust ingestion, seek medical support.

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

None required Non-flammable. Use the appropriate media in accordance with environment (Water, Dry Chemical, CO2, and Foam)

5.2. Extinguisihing media NOT to be used

There are no known incompatible extinguishing media.

5.3. Special risk

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

This point 6 it´s not applicable. The finished material poses no spillage risks, except when TECHLAM is being cut, polished, ground or removed; in this case 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 (P3, fit tests are also mandatory) when removing and cleaning waste.
Wash hands thoroughly after handling the material and before eating, drinking, smoking, and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas.

6.2. Enviromental precautions

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

The use of water is the best solution to prevent the formation of airborne dust. Whenever possible, always use water for processes such as cutting, polishing, profiling, and finishing Techlam.

- Use water equipped tools and machines for both.
- The water spary must be ample and well-directed.

6.3. Methods and material for containment and cleaning up:

In accordance with the relevant laws and regulations, waste pieces of slabs and the dust produced may be disposed of in containers for inert waste. (Waste treatment: Section 13)

7. HANDLING & STORAGE

7.1. Precautions for safe handling

To move TECHLAM tiles is recommended the use of mechanical devices to avoid the risk of back injuries for overstrain.
The user should take responsibility for carrying out a risk evaluation in accordance with workplace risk prevention regulations.
Use steel-toed footwear and wear industrial gloves when handling material. Wash hands before eating and drinking. Wash thoroughly after work using soap and water. Good hygiene practices should be followed when handling this material.

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.

7.3. Specific and uses

There are no specific recommendations for end uses.

8.
EXPOSURE CONTROLS/PERSONAL PROTECTION

For the finished material, TECHLAM does not have exposure controls or the need of personal protection.

It is only when TECHLAM tiles are being cut, polished, ground or removed, dust with free silica particles (SiO2) might be produced.

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

USA:

SUBSTANCE*	QUARTZ (RESPIRABLE)	CRSISTOBALITE (RESPIRABLE)	INSERT DUST (RESPIRABLE)
CAS No	14808-60-7	144464-46-1	-
OSHA - PEL (8-hour TWA)	0.05 mg/m3	0.05 mg/m3	5 mg/m3
NIOSH - REL (10-jour TWA)	0, 05 mg/m3	0, 05 mg/m3	-
ACGIH - TLV (8-hour TWA)	0,025 mg/m3	0,025 mg/m3	-
Adopted by / lar name	See section 16		
OEL name (if specific)	Permissible exposure limit (PEL) / Recommended exposure limit (REL) / Threshold Limit Value (TLV)		

Note *: To obtain up-to-date specific limits or limits for countries not listed here, please consult a competent health and safety professional or the local regulatory authority of the country in question.
For futher information in USA please check:https://www.osha.gov/silica-crystalline

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

The exposure to TECHLAM dust generated when TECHLAM tiles are being cut, polished, ground or removed; must be controlled and minimized using mechanical and individual protection measures.
The employers of professionals who process the material should have a risk assessment done to describe and implement the relevant occupational health and safety measures for limiting worker exposure to respirable crystalline silica and ensuring that the workplace complies with applicable local regulations on this subject.

Following, the exposure controls suggested to implement when the material is in the fabrication or installation process (follow the code pratice November 2023 Managing the risks of respirable crystalline silica from engineered stone in the workplace):

1. **Machines and tools:** The work equipment (machinery and / or cutting or polishing tools) is recommended to be wet, only sporadic dry cutting is considered acceptable in materials with thicknesses less than 5 mm and always with good ventilation. In either case, appropriate personal protective equipment is according to point 8.3.

2. **Ventilation systems:** Use ventilation (vacuum systems with H class filters.) to keep exposure to dust below of recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs using dry cutting methods or during removal of installed TECHLAM. Wet cutting methods are always recommended.

3. **Cleaning and maintenance:** Wet methods to clean are against the use of compressed air; compressed air or dry clean systems can cause a dusty environment. Preventive installation maintenance programs can reduce the dust in working environment.

In general, consult a competent health and safety professional to monitor exposure to dust containing crystalline silica.

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

	Respiratory Protection: Use of a properly fitted approved (P3) particulate respirator is recommended in the fabrication or installation process. Fit tests are also mandatory
	Hands Protection: Use Cotton or leather work gloves to avoid cuts with the pieces when handling. Wash hands with soap and water to remove the dust before breaks and at the end of the shift.
	Eye Protection: Use dust-proof goggles or safety glasses. Contact lenses may absorb irritants. Do not wear contact lenses in work areas.
	Skin protection. It is not necessary to use skin protection, it is recommended to wear work clothes and wash them after being in contact with the dust generated. In no case should it be allowed to be cleaned with compressed air.

NOTE: Personal protection information in Section 8 is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the assistance of an industrial hygienist or other qualified professional.

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 tiles:

9.1. General information

Aspect	Solid
Smell	Odourless
Ph.	Not applicable
Melting point	Not applicable
Boiling point	Not applicable
Flammability point	Not applicable
Flammability	Not flammable
Colour	As per commercial range
Relative density	2.4-2.5 g/cm3
Solubility in water	Insoluble

9.2. Other information

There is no further relevant information.

10. STABILITY & REACTIVITY

10.1. Contiditions 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 Si02 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

For the finished material, TECHLAM has no known toxicological information.

In case of cutting or polishing, the dust produced may contain silica that can cause:

11.1. Information on the likely routes of exposure

Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken slab, and/or during procedures involving the cutting of products, and/or for operations involving the removal of installed products.

11.2. Acute Effects

The dust and powder generated because of fabricating TECHLAM surfacing contains silica (SiO2).

This could affect:

1) Respiratory disease

2) Respiratory irritation- single exposure: The dust generated by the mechanical processing of this material can cause respiratory irritation if appropriate protective measures are not taken.

11.3. Chronic Effects

When TECHLAM tiles are being cut, polished, ground or removed; long-term, continual exposure to respirable crystalline silica at or above established permissible occupational exposure limits may cause severe damage to health including pulmonary fibrosis and silicosis as well as the deterioration of other lung diseases such as bronchitis and emphysema. Silicosis may increase the risk of lung cancer.

11.4. Carcinogen Status

Intact TECHLAM products are not Carcinogen.

When TECHLAM tiles are being cut, polished, ground or removed; dust produced can have silica, the part of respirable crystalline silica is classified by the International Agency for Research on Cancer (IRAC) as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as “Known to be a Human Carcinogen”. USDOL/OSHA and NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.

MATERIAL CLASSIFICATION	CRYSTALLINE SILICA (QUARTZ)
CLP	Carcinogenic. Category 1A.
IARC	Group 1. Carcinogenic to humans

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Tehclam is not toxic. Use the product in accordance with good work practices, avoiding dispersing it in the environment.

12.2. Persistence and degradability

Techlam is not biodegradable.

12.3. Bioaccumulation potential

It is believed that it does not bioaccumulate significantly.

12.4. Mobility in the soil

Techlam is not soluble significantly.

12.5. Result of the evaluation of PBT and vPvB

Techlam does not present risks of persistence, bioaccumulation, and toxicity; therefore, it is not considered PBT or vPvB.

12.6. Other harmful effects

No data available on other hazardous properties for the environment.

13.
DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

TECHLAM waste may be disposed of according to the regulations:

- Delivery to an authorised waste manager.
- 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. 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 trail transport	Unlimited ADR/RID TPC/TPF
Sea transport	Unlimited IMDG/IMO
Air transport	Unlimited ICAO/IATA

15. REGULATORY INFORMATION

Important warning:
Techlam product is not classified as hazardous or dangerous to human health or the environment.
The information in this data sheet provides information related to the potential hazards associated with dust which may be produced during installation and/or removal process.

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

Specific legislation in the United States:

• OSHA's Respirable Crystalline Silica Standard: This product or its components meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Stanard (29 CFR Section 1910.1200): Health Hazard (Sections 3 and 11)

• Californian Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65:

WARNING: This product can expose you to chemicals including crystalline silica and titanium dioxide (airborne particles of respirable size), which are known to the State of California to cause cancer. For more information go to www.P65warnings.ca.gov

International legislation:
• Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (Latest 2017 edition) – UN.

Applicable European legislation:

- Regulation (EC) 1907/2006 (REACH) OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, updated according to Regulation (EU) 2015/830 of 28 May 2015, which modifies Regulation EC) nº 1906/2006.
- European Directive 2004/37/EC modified by European Directive 2017/2398 dated 27/12/2017.
- Regulation (EC) No. 1907/2006 REACH, Annex XIV List of substances subject to authorisation, with its later modifications: Not present, or not present in regulated quantities.
- Regulation (EC) No. 1907/2006, Annex XVII, Substances subject to restrictions on manufacture, placing on the market and use: Not present, or not present in regulated quantities.
- Regulation (EC) No 1272/2008 (CLP) OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
- REGULATION (EU) 2016/918 OF THE COMMISSION of 19 May 2016 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures.
- European 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.

Australia legislation:

https://hcis.safeworkaustralia.gov.au/

16.
OTHER INFORMATION

16.1. Legislative texts and phrases included in section 3 Regulation no 1272/2008 (CLP)

STOT RE 1: Specific Target Organ Toxicity (repeated exposure). Category 1.
STOT SE 3: Specific Target Organ Toxicity (single exposure). Category 3
Carc. 1A: Carcinogenic. Category 1A.
H372: Causes damage to organs through prolonged or repeated exposure.
H350i: May cause cancer by inhalation.
H335: May cause respiratory irritation.

16.2. Complementary information

All information and recommendations in this document are up-to-date and accurate to the best of our knowledge. Nothing expressed herein can be interpreted or construed as a guarantee of specific properties.
We do not make any warranties, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereof.

We recommend contacting with LEVANTINA GROUP before using or supplying the product for any type of application other than those mentioned above.
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 to fulfil the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200).

16.3. For further informmation:

USA:

- International Labor Organization (http://www.ilo.org)
- The Occupational Safety & Health Administration (www.osha.gov)
- American onference of Governmental Industrial (https://www.acgih.org/)
- European Network for Silica (http://nepsi.eu/good-practice-guide.aspx)
- Californian Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65
- (https://oehha.ca.gov/chemicals/silica-crystalline-respirable)

Europe:

- General information about silica: http://www.eurosil.eu/silica-and-health
- Good Practices Guidance about Silica, NEPSI: https://www.nepsi.eu/
- Occupational Exposure Limits – Respirable dust: http://www.ima-europe.eu/about-industrial-minerals/industrial-minerals-ima-europe/silica
- Summary about Exposure Limits – Respirable dust updated in 2020: https://www.nepsi.eu/sites/nepsi.eu/files/content/document/file/oel_full_table_january_2021_europe.pdf

Austrialia:
- https://www.safework.nsw.gov.au/resource-library/hazardous-chemicals/crystalline-silica-technical-fact-sheet

Diciembre 2023

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