



TECHNICAL SAFETY MANUAL

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BY ALPAS GLOBAL

SAFETY • HANDLING • PROCESSING • STORAGE

ALPAS GLOBAL 2025, S.L.

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Spain

SURFACES THAT INSPIRE
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INTRODUCTION

This Technical Safety Manual from ALPAS GLOBAL provides general information about the physical, chemical and mechanical characteristics of dry-pressed ceramic slabs, as well as the necessary recommendations for their handling, storage, processing and installation under safe conditions.

The document includes guidelines on the behavior of the material during its transportation, transformation and installation, as well as recommendations related to risk prevention and personal protective measures during handling and processing.

CRYSTALLINE SILICA AND RISK OF SILICOSIS

Crystalline silica is one of the most common minerals in nature, composed mainly of silicon (Si) and oxygen (O), and represents approximately 74 % by weight of the Earth's crust.

It is present in various construction materials in the following approximate concentrations:

• Marble	0 – 5 %
• Ceramic (ABK Group production):	15 – 20 %
• Granite	15 – 35 %
• Slate	up to 40 %
• Quartzite	more than 95 %
• Reconstituted quartz	85 – 100 %

Activities that generate dust, such as cutting, grinding, shaping, milling, drilling and other operations, can release respirable crystalline silica.

Exposure to this dust can affect the respiratory tract and cause diseases such as:



Silicosis



Chronic obstructive pulmonary disease (COPD)



Lung cancer

The risk of developing silicosis depends on the concentration of crystalline silica and the duration of exposure.

Preventive and protective measures must be established according to the results of the risk assessment.

Ceramic is a safe material. It is essential to handle ceramic products correctly and apply appropriate preventive measures during dust-generating operations.

PRODUCT AND COMPANY IDENTIFICATION

Series:	Maxline 12 mm, 20 mm
Brand:	Maxline by ALPAS GLOBAL
Common name:	Dry-pressed ceramic slabs
Chemical name:	None
Chemical family:	Natural inorganic products
Chemical formula:	Not applicable
CAS Registry No.:	Not applicable
Company:	ALPAS GLOBAL
Address:	Carril del Palmeral 28, El Puntal, Murcia, Spain
Phone:	+34 609 323 590
Website:	www.alpasglobal.com
Emergency phone:	+34 915 62 04 20 (Toxicological Information Medical Service)



Recomendad use:

Construction material for architecture and furniture – Dry-pressed ceramic slabs, water absorption ($E < 0.5 \%$), Group Bla Annex G in accordance with ISO 13006.



Instructions for use:

Construction material for architecture and furniture – Dry-pressed ceramic slabs with water absorption $E < 0.5 \%$, classified as Group Bla in accordance with ISO 13006, Annex G.

HEALTH & SAFETY

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Global Alpas sintered stone slabs are manufactured from natural mineral raw materials processed through high-temperature sintering technology.

The product contains crystalline silica (SiO_2) in an approximate proportion of 10–15 %, integrated within the compact ceramic matrix of the material.

In its final form, the product is chemically stable, inert and not hazardous under normal conditions of use such as countertops, floors or cladding.



Not classified as hazardous according to Regulation (EU) No. 1272/2008. The product is inert and, under normal use, does not pose any risk to human health or the environment. However, during cutting, grinding, shaping, milling or drilling operations, respirable dust may be generated that contains crystalline silica (SiO_2). Prolonged or repeated inhalation of respirable crystalline silica dust may be harmful to health and cause respiratory diseases such as silicosis.



FIRST AID

The material in its finished form does not require special preventive measures. During cutting, grinding, shaping or drilling operations, preventive measures must be taken against silica dust.



- **Inhalation:** move away from exposure and breathe fresh air. Seek medical attention if you feel unwell.



- **Eye contact:** rinse thoroughly with plenty of water for several minutes.



- **Skin contact:** the dust is not irritating to the skin. Wash with soap and water.



- **Ingestion:** not applicable.

FIRE FIGHTING MEASURES



- **Fire resistance:**

Category: A1 without reinforcement mesh;
A2, s1-d0 with reinforcement mesh.



- **Suitable extinguishing agents:**

Any suitable agent for the type of surrounding fire.
Polyvalent powder fire extinguishers are recommended.



- **Specific hazards of the mixture:**

No hazards arising from the composition of the product in case of fire.
Non-combustible.



- **Recommendations for fire fighting personnel:**

If a fire situation occurs, depending on the magnitude of the fire
it may be necessary to use full protective clothing and self-contained breathing apparatus.



- Provide a minimum of emergency facilities or response equipment (fire blankets, portable first aid kit, ...) in accordance with R.D. 486/1997 and subsequent amendments.



- **Personal protective equipment:**

According to the surrounding fire.

MEASURES IN CASE OF ACCIDENTAL SPILL



- **General description:**

Due to the solid and inert nature of the material,
no significant risks are expected in the event
of accidental spill.



- **Personal precautions:**

Not applicable.



- **Environmental precautions:**

No specific measures are required.



- **Cleaning methods:**

Not applicable.



COMPOSITION AND INFORMATION ON COMPONENTS

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The material corresponds to a dry-pressed ceramic product classified as Group Bla according to ISO 13006, with water absorption lower than 0.5%.

It consists of a mixture of natural mineral raw materials, mainly clays, kaolins and feldspathic sands, together with inorganic pigments used for colouring the material.

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MAIN COMPONENT

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Substance / Substance	%	CAS
Quartz (crystalline silica)	10–15 %	14808-60-7



AVERAGE CHEMICAL COMPOSITION

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Component / Component	%
SiO ₂	60–70
Al ₂ O ₃	20–30
Fe ₂ O ₃	0–3
CaO	0–5
MgO	0–1
Na ₂ O	3–5
K ₂ O	1–3
ZrO ₂	< 1



Chemical characterization: Mixture of sintered natural minerals.

The crystalline silica content corresponds to the quartz fraction contained within the ceramic matrix of the material.

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INERT AND
STABLE PRODUCT

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SINTERED AT
HIGH TEMPERATURES

HIGH-TEMPERATURE
SINTERED



RESPIRABLE DUST
DURING MACHINING

RESPIRABLE DUST
DURING MACHINING



PROTECT YOUR HEALTH
USE PROTECTION

PROTECT YOUR HEALTH
USE PROTECTION

FIRE FIGHTING MEASURES



- **Fire reaction**

Global Alpas sintered stone slabs have been classified as fire reaction A1 without reinforcement mesh or A2xs1,d0 when incorporating reinforcement mesh, in accordance with EN 13501-1.



- **Suitable extinguishing agents**

The material is non-combustible. In case of fire in the surroundings, use appropriate extinguishing agents for the type of fire present.



- **Specific hazards arising from the material**

No specific hazards associated with the composition of the product are expected in case of fire.



- **Recommendations for emergency personnel**

In fire situations, personnel should use appropriate protective equipment and, when necessary, self-contained breathing apparatus.



- **Recommended facilities and equipment**

Provide a minimum of emergency facilities or response equipment (fire blankets, portable first aid kit, ...) in accordance with R.D. 486/1997 and subsequent amendments.



- **Personal protective equipment**

According to the surrounding fire.

MEASURES IN CASE OF ACCIDENTAL SPILL



- **General description**

Due to the solid and inert nature of the material, no significant risks are expected in the event of accidental spill.



- **Personal precautions**

Not applicable.



- **Environmental precautions**

No specific measures are required.



- **Cleaning methods**

Not applicable.

HANDLING AND STORAGE

- The material must be handled using adequate ventilation systems or lifting devices.
- During manual handling, precautions must be taken to avoid breakage or dropping of the pieces.
- Use cut-resistant gloves, safety footwear and protective goggles during handling or machining operations.
- Take into account the weight and dimensions of the slabs to avoid overexertion.

Storage

- No special storage conditions are required.
- Protect the material from impacts or blows that may cause breakage of the pieces.
- Preferably keep the material in its original packaging until the time of use.

TOXICOLOGICAL INFORMATION

Dust generated during machining, cutting and grinding processes contains particles in suspension of free silica. Prolonged exposure to respirable crystalline silica (SiO_2) may cause pulmonary fibrosis and silicosis. Symptoms manifest as a noticeable loss of lung capacity.

EXPOSURE CONTROLS

Control parameters: due to the possibility of dust generated during cutting or grinding, it is recommended to carry out these operations using wet methods. The standard referring to occupational exposure limits for crystalline silica is established in R.D. 1154/2020.

DAILY EXPOSURE LIMIT VALUES

Substance	CAS No. / CAS No.	VLE - ED / OEL (*)
Respirable crystalline silica / Respirable crystalline silica	14808-60-7	0.1 mg/m ³

(*) Limit values applied in Spain according to R.D. 1154/2020. Consult the regulatory values in each country.

Exposure to dust generated during machining processes (cutting or grinding) must be controlled and minimized. Exposure control must be carried out using collective and individual protective measures.

Minimize dust generation by using forced ventilation systems and water supply systems. Do not use compressed air and continuously filter the air.

Work clothing: use specific clothing for cutting and grinding tasks.

Dirty work clothing must be removed and washed separately. Provide separate storage areas for work clothing and street clothing.



PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Solid
Odor	Odorless
Color	According to commercial range
pH	Not applicable
Density	2350 – 2410 kg/m ³
Water solubility	Insoluble
Boiling point	Not applicable
Ignition point	Not applicable

STABILITY AND REACTIVITY

Property	Value
Reactivity	Not applicable
Chemical stability	Stable
Hazardous reactions	Not known
Conditions to avoid	Formation of dust during machining. Avoid contact with strong acids during prolonged periods.
Incompatible materials	Strong acids
Hazardous decomposition products	Not known

PERSONAL PROTECTIVE EQUIPMENT



Respiratory protection

Use respiratory protection against particles type P3 (EN 143).



Eye protection

Use safety goggles with particle splash protection.



Hearing protection

Use hearing protectors in environments with prolonged exposure to noise.



Hand protection

Use cut-resistant mechanical protection gloves to prevent accidental cuts or breakage of parts.



Safety footwear

Use safety boots to minimize the risk of falling material onto the feet.



Work clothing

Use appropriate work clothing and wash it separately.

CONSIDERATIONS RELATED TO DISPOSAL

The management and disposal of waste generated by Global Alpas material must be carried out in accordance with the current regulations on waste management.

Whenever possible, waste must be managed through authorized waste managers. Packaging materials, such as cardboard, paper or wood, should preferably be directed to recycling processes through authorized companies.

INFORMATION RELATED TO TRANSPORT

Global Alpas material is not classified as dangerous goods according to the main international transport regulations.

Mode of transport	Status
Land transport	Not restricted
Maritime transport	Not restricted
Air transport	Not restricted

REGULATORY INFORMATION

This document has been prepared taking into account the principles established in the European regulation on classification, labelling and packaging of substances and mixtures (Regulation CLP – EC No. 1272/2008).

OTHER INFORMATION

The information included in this data sheet is intended to provide general recommendations for the safe handling of the product and to contribute to the prevention of risks during its handling, transformation and installation.

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Health hazard = 0 | **Flammability = 0** | **Reactivity = 0**

The product must be used exclusively for the uses specified by the manufacturer.

The product must only be used for the purposes specified by the manufacturer.



ENGINEERING FOR ARCHITECTURE

INNOVATION • DESIGN • PERFORMANCE

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