



This safety Information Sheet doesn't replace the current regulatory and company requirements.

1. Product and Company identification

Series: **Valiant Porcelain** Trademark: **Valiant Surfaces**

Common Name: Dry-pressed ceramic tiles (SLAB)

Chemical Name : None

Chemical Family: Natural inorganic products

Chemical Formula: Not applicable

CAS Reg. No.: Not applicable

Email: info@valiantsurfaces.com

Recommended use: Building material for architectural and furnishing - Dry pressed ceramic tiles water absorption ($E < 0,5\%$), Group B1a annex G according with ISO13006.

According with REACH (Registration, Evaluation, Authorization and Restriction of Chemicals –EU Regulation 18/12/2006), ceramic tiles are classified as "ARTICLE: object with physical properties more important to its function than any chemical properties" so that, a SDS is not required/mandatory.

2. Hazard identification summary

The finished, fired tiles are odorless, stable, non-flammable, and pose no immediate hazard to health.

The fired tiles do not contain asbestos. They do not release hazardous materials after installation and are not considered hazardous waste when disposal is necessary under normal conditions. Respiratory, hand and eye protection may be needed to prevent excess exposure to airborne particulates if dust is produced by cutting the tiles during installation or if dust is produced by any other operations, including demolition/removal projects.

3. Composition, information of ingredient

General description:

Ceramic material according to ISO 13006, table 1, Group B1a: dry-pressed products with porosity not exceeding 0.5%.

Composition: "Big Slabs" slabs are produced from a finely ground mixture of natural raw materials such as clays, kaolin, and feldspathic sands, together with inorganic pigments.

The production process involves forming at high pressure and firing at a temperature such as to induce irreversible transformations that lead to obtaining a homogeneous, solid and compact mass, insoluble in water and chemically resistant. From the mineralogical point of view the material obtained can be assimilated to a prevailing vitreous mass (amorphous phase) that incorporates both residual and newly formed crystals.

VALIANT

PORCELAIN

Mineralogical composition	%	CAS registry number
α -quartz	7 - 18	14808-60-7
Corindone	0 - 5	1344-28-1
Mullite	5 - 12	1302-93-8
Amorphous phase*	60-70	N.A
Feldspars	4 - 15	68476-25-5

Chemical average composition	
ITEM	%
SiO ₂	60-70
Al ₂ O ₃	20-30
Fe ₂ O ₃	0-3
CaO	0-5
MgO	0-1
Na ₂	3-5
K ₂ O	1-3
ZrO ₂	<1

*As regards the amorphous phase, it refers to the part of the mixture which, during firing process, melts and transforms into glass; its chemical composition corresponds to the average composition of the mixture.

4. First aid measures

Non applicable for intact tiles.

Tiles are monolithic objects, and they generate dust only when they are dry-cut.

IF ON SKIN OR CLOTHING: Wash thoroughly after working with tiles.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a doctor for treatment advice.

IF INHALED: Remove to fresh air if exposed to large amounts of tile dust. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call a doctor for treatment advice.

IF SWALLOWED: .Not applicable for intact tiles.

Have emergency eyewash station available in area where tiles are cut.

5. Firefighting measures

Flash Point (Method Used)	Not applicable
Autoignition Temperature	Not applicable
Flammable Limits (% by Volume in Air)	LFL - not applicable
Fire Extinguishing Media	None required Non-flammable
Special Fire Fighting Procedures	None required
Fire and Explosion Hazards	None



6. Accidental release measures

Non applicable for intact tiles.

7. Handling and storage

HANDLING: to reduce at the minimum the generation and accumulation of dust wet cutting is recommended.

When wet cutting is not possible, working in a well-ventilated area and the use of respiratory protection is mandatory.

STORAGE: Do not store near acids. If tiles contact some acids, damage/discoloration to the surface may occur.

Shelf life is unlimited.

8. Exposure controls, personal protection 8.1 Exposure table

In case of exposure to respirable dust generated during cutting or demolition 8 (at the date of issue of this sheet) :

Major Ingredient	OSHA PEL	NIOSH IDLH	ACGIH TLV*	Units
Crystalline silica as quartz -respirable fraction	$\frac{10}{\%SiO_2 + 2}$	0.05	0.025	mg/m ³
Total dust	$\frac{30}{\%SiO_2 + 2}$	No	No	mg/m ³

* 2006 Edition, respirable fraction to be determined as per Appendix D of ACGIH TLV.

8.2 Engineering controls/personal protection

VENTILATION: Use adequate ventilation to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during installation using dry cutting methods or during removal of installed tile. Wet cutting methods are recommended to reduce almost completely this risk.

EYE PROTECTION: Safety goggles or glasses with side shields.



CLOTHING: Long-sleeved shirt and long pants, Chemical-resistant footwear plus socks and safety boots.

GLOVES: Cotton or leather gloves,

RESPIRATOR: Not required when handled under normal conditions. When handling in enclosed areas with inadequate ventilation, use a dust/mist filtering respirator.

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 be obtained.

9. Physical and chemical properties

Appearance	Brittle solid; colour may vary
Odour	Odourless
Melting Point	Not Available
Boiling Point	Not applicable
Vapour Pressure	Not applicable
Vapour Density (Air = 1)	Not applicable
Solubility in Water	Insoluble
Percent Volatile by Volume	Not applicable

10. Stability and reactivity

Stability	Stable in current form.
Conditions to Avoid	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Incompatibility (Materials to Avoid)	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	None

11. Toxicological information

Slabs are monolithic objects, and they generate dust only when they are dry-cut.

Thus, a potential hazard for human health connected to ceramic tiles due to Respirable Crystalline Silica (that is only a fraction of the generated dust) occur only in case of non-capture or non-abatement of dust for long exposure time.

The risks related to dust/breathable that may contain crystalline silica in their fraction respirable, and may cause lung injury and cancer hazard, are reported in the following table:



GHS Classification	Hazard Statements
Crystalline Silica: Category 3 (Respiratory tract irritation) (H335)	May cause respiratory irritation
Categories 1A (H372)	Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation)

12. Ecological information

No information available at this time.

13. Disposal consideration

Waste should be disposed of in a landfill certified to accept such materials in accordance with federal, state, and local regulations.

14. Transport information

D.O.T Shipping Name	Not applicable
Hazard Class	Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
ID Number	Not applicable
Marking	Not applicable
Label	None
Placard	None
Hazardous Substance/RQ	Not applicable
Shipping Description	Ceramic Tiles
Packaging References	None

15. Regulatory information

The product is excluded from registration obligations as it does not contain substances intended for intentional release (Articles 33 and 57 of the REACH Regulation)



Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced during cutting or otherwise changing the shape of the tile during installation and/or removal.

16. Other information

Global Harmonization Identification System

Health: 3 Fire: 4 Reactivity: 4

Hazardous Material Identification System

Health: 1 Fire: 0 Reactivity: 0

National Fire Protection Association

Health: 1 Fire: 0 Reactivity: 0

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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