

MATERIAL SAFETY DATA SHEET

PORCELAIN POWDER

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

- 1.1 **Product name:** PORCELAIN POWDER FOR ZIRCONIUM FRAME
- 1.2 **Trade name:** G-CERAM ZF
- 1.3 **Application/Use of the product:** DENTAL CROWN AND BRIDGE WORKS
- 1.4 **Company/Manufacturer:** ATLAS-ENTA DIŞÇILIK SANAYİ VE TİCARET A.Ş.
İzmir Pancar OSB. 9.Cadde no.10/A, 35865 Torbalı , İZMİR-TÜRKİYE
Tel: +90.232.433.7351 Fax: +90.232.469.6087
- 1.5 **Emergency information:** ATLAS-ENTA DIŞÇILIK SANAYİ VE TİCARET A.Ş.
İzmir Pancar OSB. 9.Cadde no.10/A, 35865 Torbalı , İZMİR-TÜRKİYE
Tel: +90.232.433.7351 Fax: +90.232.469.6087

2. COMPOSITION / INFORMATION ON INGREDIENTS – main components

- 2.1 **Chemical composition:** Ceramic powder of Feldspar and pigments

2.1.1 Composition of Feldspar:

Chemical	SiO ₂	Al ₂ O ₃	Na ₂ O	K ₂ O	Fe ₂ O ₃	TiO ₂	CaO	MgO
Qty	65,16%	8,5%	3,4%	12,4%	<0,06%	0,02%	0,24%	0,22%

- 2.2 **Physical components:** None
- 2.3 **Hazardous components:** None
- 2.4 **Further information:** None

3. HAZARDS IDENTIFICATION

- 3.1 **Hazard description:** The product presents no toxic hazard.
- 3.2 **Chemical dangers:** None
- 3.3 **Physical dangers:** None
- 3.4 **Further information:** The product presents no toxic hazard

4. FIRST AID MEASURES

4.1 **Description of First Aid Measures**

Eyes contact with dust:

Skin contact:

Ingestion:

Inhalation:

Flush eyes with plenty of water; mechanical effects only.

No specific requirements.

Give large amounts of water.

No specific requirements.

- 4.2 **Notes to medical doctor:** No specific antidote. Effect support therapy. Care should be effected according doctor's evaluation with respect to the patient's reactions..

5. FIRE-FIGHTING MEASURES

- 5.1 **Extinguishing media:** Dry chemical, CO₂, water spray or regular foam.

5.2 Special hazards arising from the substance

<u>Hazardous combustion products:</u>	None
<u>General Hazard:</u>	Non-combustible.
<u>Properties contributing to</u>	
<u>Flammability:</u>	None
<u>Flashpoint:</u>	Not applicable
<u>Flammable limits in air:</u>	Upper: Not available Lower: Not available.
<u>Auto ignition temperature:</u>	Not applicable
<u>Sensitivity to static discharge:</u>	Not applicable
<u>Sensitivity to static impact:</u>	Not applicable

5.3 Advice for fire-fighters: None

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Person related safety precautions: Not required.
- 6.2 Measures for environmental precautions: Avoid dispersion.
- 6.3 Measures for cleaning: Clean up mechanically.

7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling: Only adequately trained personnel should handle this product.
- 7.2 Industrial hygiene: None.
- 7.3 Conditions for safe storage: Store in cool and dry place with no exposure to sunlight.
- 7.4 Fire- and explosion-protection: None.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 8.1 Technical measures: Provide adequate local ventilation.
- 8.2 Personal protective equipment
- 8.2.1 Hand protection: Gloves.
- 8.2.2 Eyes protection: None particular precaution should be taken with normal usage.
- 8.2.3 Respiratory protection: No needed with normal usage. When product is grinded or polished, use localized aspiration of dusts and/or protective mask.
- 8.2.4 Other: None

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties
- | | |
|---|--------------------------|
| <u>Colour:</u> | Tooth shaded. |
| <u>pH:</u> | Not applicable. |
| <u>Melting point:</u> | Decomposes at 1400C. |
| <u>Boiling point:</u> | Not applicable. |
| <u>Flash point:</u> | Not applicable. |
| <u>Evaporation rate:</u> | Not applicable. |
| <u>Flammability:</u> | Not combustible. |
| <u>Flammable limits:</u> | Not applicable. |
| <u>Vapor pressure:</u> | Not applicable. |
| <u>Vapor density:</u> | >6.0 g/cm ³ . |
| <u>Specific gravity:</u> | Not applicable. |
| <u>Solubility in water:</u> | Not soluble. |
| <u>Partition coefficient n-octanol/water:</u> | Not applicable. |

Autoignition temperature: Not applicable.
Decomposition temperature: Not applicable.
Viscosity: Not applicable.
Explosive properties: Not explosive.
Oxidizing properties: Not an oxidizer

9.2 **Other information**

Self-reactive properties: Does not meet classification criteria.
Pyrophoric properties: Does not meet classification criteria.
Self-heating properties: Does not meet classification criteria.
Water reactive properties: Does not meet classification criteria.
Corrosive to metals: Does not meet classification criteria.
Molecular weight: -

10. STABILITY AND REACTIVITY

10.1 Chemical stability: Stable.
 10.2 Reactivity: None.
 10.3 Possibility: None.
 10.4 Conditions to avoid: Stable in normal conditions.
 10.5 Incompatible materials: None.
 10.6 Hazardous decomposition products: None when correctly utilized.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicokinetics, metabolism and distribution
Non-human toxicological data No available.
 Method:
 Dosis:
 Routes of administration:
 Results:
 Absorption:
 Distribution:
 Metabolism:
 Excretion:

11.2 Information on toxicological effects
 11.2.1 Acute Toxicity: This product is not hazardous according to EEC criteria.

<u>Substance</u>	<u>Oral:</u>	<u>Dermal:</u>	<u>Inhalation:</u>
Porcelain powder	none	none	none

11.2.2 Skin Corrosion/Irritation: No classification
Substance Data
 Porcelain powder None

11.2.3 Serious Eye Damage/Irritation: No classification
Substance Data
 Porcelain powder None

11.2.4 Respiratory or Skin Sensitization: No classification
Substance Data
 Porcelain powder Non-sensitizing

11.2.5 Carcinogenicity, Mutagenicity, Reproductive Toxicity: No classification
Substance Germ Cell Mutagenicity Carcinogenicity Reproductive Toxicity
 Porcelain powder Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

Carcinogenicity Listings Not listed.

11.2.6 Specific Target Organ Toxicity (STOT) --Single Exposure: No

classification

Substance

Porcelain powder

Based on available data, the classification criteria are not met.

11.2.7 Specific Target Organ Toxicity (STOT) -- Repeated Exposure: No classification

Substance

Porcelain powder

Based on available data, the classification criteria are not met.

11.2.8 Aspiration Hazard: No classification

Substance

Porcelain powder

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

- 12.1 **Toxicity:** Insoluble. No dangers for environment are known.
12.2 **Persistence and degradability:** The material is known to be stable in environment. Due to the low biodegradability the product should not reach water or ground.
12.3 **Bioaccumulative potential:** No data available for the product.
12.4 **Mobility in soil:** No data available for the product.
12.5 **Other adverse effects:** None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Use a qualified industrial waste disposal facility. Dispose of waste according to local laws and regulations.

14. TRANSPORT INFORMATION

- 14.1 **Transport at Land - road and railroad :** Class ADR/RID No dangerous cargo
UN Number: None
UN proper shipping name: None
Packing group: None
- 14.2 **Transport at Sea:** Class IMDG No dangerous cargo
UN Number: None
UN proper shipping name: None
Packing group: None
- 14.3 **Air Transport:** Class IATA-DGR No dangerous cargo
UN Number: None
UN proper shipping name: None
Packing group: None
Subsidiary Risk: None
Labels: None
Passenger Airplane No dangerous cargo
Packing Instructions: None
Max. Capacity: None
Cargo Airplane No dangerous cargo
Packing Instructions: None
Max. Capacity: None
- 14.4 **Further information** This product/medical device is not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance

EUROPEAN UNION:

This product is a medical device according to the EC-directive 93/42/EEC.

UNITED STATES and CANADA:

This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

15.2 Chemical Safety Assessment

This product does not require classification as Dangerous Goods

16. OTHER INFORMATION

Warning for the reader: important

This medical device has been studied and formulated for an exclusive professional dental use and must be used following instructions, procedures and precautions of use. The information disclosed in this Safety Data is believed to be correct to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other material or in any process, unless specified in the text. However, this document aims to provide the necessary health and safety information of the product and is not to be considered a warranty or quality specification and shall not establish any legally valid contractual relationship. Considering that used conditions and modes are not under our control we can't assume any responsibility for results that do not meet user's expectations. The manufacturer is not responsible for damages due to incorrect use or undue handlings. Furthermore, Atlas-Enta Dişçilik San ve Tic A.Ş. is not responsible for disposal or testing of this product for hazardous content, and will not be liable to any party for such disposal, testing, or content. This safety data sheet overrules and substitutes any previous edition.

Further information on the product:

For further information consult the product datasheet. Before use, operators must be sure that the product characteristics are suitable to their needs.

REVISION SUMMARY: Revision # 0.

This MSDS has been prepared to meet European Regulation (EC) No 1907/2006.

Copyright 2012. Atlas-Enta Corporation, Porcelain Division. All Rights Reserved.