



1: Identification of the substance and the company

Manufacturer: Elephant Dental B.V., Verlengde Lageweg 10, 1628 PM Hoorn, The Netherlands,
Tel: +31/229-259000, www.elephant-dental.com

Trade name: Antagon & Carrara Interaction Glaze

Description: Dental Ceramic, type 1 for use on the ceramic surface of porcelain fused to metal restorations made with Carrara Volumia, Antagon Interaction or Carrara Interaction.
Shades: transparent

Product group: Dental ceramics

Application domain: Dental ceramic for firing on Antagon and Carrara ceramics.

Contra-indication: Do not use for patients known to be allergic to any of the components.

Form: Powder

Packing: Glass bottles

Art. no.: 484203071

This MSDS replaces the MSDS of Universal glaze.

2: Composition/information of ingredients

Composition contains ceramic frits and inorganic pigments.

For the actual composition there are no CAS numbers available, the composition is calculated as:

Composition:	CAS-no.	Unit	Range
- Silicon dioxide (SiO ₂)	-	wt.%	60 - 65
- Aluminum oxide (Al ₂ O ₃)	-	wt.%	7 - 10
- Potassium oxide (K ₂ O)	-	wt.%	5 - 7
- Sodium oxide (Na ₂ O)	-	wt.%	12 - 16
- Barium oxide, (BaO)	-	wt.%	2 - 4
- Titanium dioxide, (TiO ₂)	-	wt.%	0 - 2
- Fluorine, (F)	-	wt %	0 - 2
- Other elements <1%	-	wt.%	< 2

3: Hazards identification

Acute health effects of dust during processing

- Inhalation: Coughing, irritation.
 - Ingestion: Coughing, irritation.
 - Skin: Irritation
 - Eyes: Irritation.
- Carcinogenicity** No carcinogenetic effects are known

Medical conditions

aggravated by exposure: None known

Potential environmental effects: None known

4: First aid measures

Inhalation: Avoid inhalation.

Ingestion: Avoid ingestion

Skin: Rinse with water

Eyes: Rinse with plenty of water.

Other: None

Special first aid measures: None

Notes to physician: None



5: Fire fighting measures

This product is fire and explosion resistant.
No special measures required.

6: Accidental release measures

Personal precautions: Avoid inhalation of dust during processing and contact with eyes or skin. Grinding and/or polishing only under adequate ventilation.

Environmental precautions: None known.

Containment techniques: Remove dust by vacuuming or wet sweeping to prevent powdering in the air. Wear approved respirators and protective clothing. Use containerized disposal. No special precautions are required for ceramic in solid shapes.

Evacuation procedures: N/A

Reporting requirements: N/A

7: Handling and storage

Handling: Grinding: object suction, do not inhale dust and vapors.
No special precautions required, when used according to the instructions.

Storage: Store closed and dry

Shelf life: Ceramic powder has a limited shelf life of 15 years.

8: Exposure control and personal protection

Applicable during processing

General recommendations: General and local ventilation and exhaust filtration should be employed.

Special precautions: No special precautions required, when used according to the instructions.

Respiratory protection: Dust mask P1.

Skin protection: Wear protective clothing and gloves.

Eye protection: Wear safety glasses, with side protection

Hygienic measures: Wash face and/or hands before break and end of work. When using chemicals, read the safety instructions before use. Do not eat, drink, or smoke during processing

9: Physical and chemical properties

Specific properties	Unit	Range
Form	N.a.	Powder
Smell	N.a.	None
Color	N.a.	White
Bending strength	MPa	-
Thermal expansion coefficient (25-500°C)	µm/m.K	10.9 - 11.9
Glass transition temperature (Tg)	°C	420 - 440
Density	g/cm ³	2.4 - 2.6
Firing temperature	°C	820 - 900
Solubility (ISO 6872)	µg/cm ²	< 100



10: Stability and Reactivity

Stability: Stable. Ceramic powder has a limited shelf life of 15 years
Conditions to avoid: No special information
Materials to avoid: Hydrofluoric acid (HF), ceramics dissolve in HF
Hazardous decomposition products: No special information
Hazardous polymerization possible: Yes No

11: Toxicological information

If this product is used properly, no toxic effects can be expected. Tests of cytotoxicity according to ISO 10993, have shown no negative effects.

12: Ecological information

When handled correctly there are no ecological effects to be expected.
Inert material, not soluble in water, no damage to the environment

13: Disposal considerations

Product: None, inert material, no damage to the environment.
Packaging: Disposal in accordance with local regulations Packaging can be reused or recycled, cleaning before disposal is not required.

14: Transport information

This product is not subject to transport regulations.

15: Regulatory information

Symbol: None
R-Phrases: None
S-Phrases: None
MDD-93/42-EEC-Labeling: CE 0336

16: Other information

See instructions for use.
International product standards: ISO 6872.
Changes, compared to the previous version, are marked with an *. This MSDS replaces the Universal Glaze MSDS.
The information provided is correct to the best of our knowledge at the date of the publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation and disposal and is not to be considered a warranty or quality specification.
This safety data sheet is according EU-directives 91/155/EEG, 93/112/EG and 2001/58/EG.