

MATERIAL SAFETY DATA SHEET

According to EC Directives 91/155/EWG and 93/112/EEC

Date of Issue: 07.Feb.2007

Version: 001

Date of Print: 07. Feb. 2007

KLEMA

Willi Geller Creation® ZI-F

Page 1 of 4

1 Product and company identification

Trade Name: Willi Geller Creation® ZI-F

Products: Dentine, Bleach Dentine Enamel, Clear, Window
Frame Shade, Opak Dentine, Neck Dentine Transpa OT / TI
Effect Enamel SI / PS HT / SP / MI Powders
Gingival, Approx. Dentine

Utilisation. Dental ceramic

Manufacturer: KLEMA Dentalprodukte GmbH
Koblacherstraße 3a, A-6812 Meiningen
Phone: +43 5522 36837

Producers and suppliers of raw material:

As Norsk Feldspat Co.

P.O.Box, Kristiansand/Norwegen

Riedel-de Haën AG

Postfach 10 02 62, D-30918 Seelze
Tel. +49 5137 999-0

Fluka Chemie AG

Industriestraße 25, CH-9471 Buchs
Tel. +41 81 755 25 11

CERDEC AG Keramische Farben

Postfach 11 04 03, D-60039 Frankfurt
Tel. +49 69 27 116-0

SIHELCO AG

Hauptstraße 56, CH-4127 Birsfelden
Tel. +41 63 313 0606

Siegfried AG

CH-4800 Zofingen
Tel. +41 62 746 11 11

DEGUSSA AG

Weißfrauenstr 9, D-60311 Frankfurt
Tel. + 49 69 218-01

ELEKTRO-THERMIT GmbH

Postfach 101043, D-45010 Essen
Tel. +49 201 173 2674

KRONOS TITAN-GmbH

Peschstraße 5, D-51373 Leverkusen
Tel. +49 214 356-0

Rhône-Poulenc Handels GmbH

Gersthoferstraße 119, A-1180 Wien
Tel. +43 1 47 92 591

Information: +43 5522 36837-33 (Klema GmbH; Ceramics Div.)

Emergency contact number: +43 1 40643-43 (Vergiftungsinformationszentrale Wien)

2 Composition/Information on ingredients

Chemical characterisation: Dental ceramic

<u>Component</u>	<u>Amount in wt.-%</u>	<u>CAS #</u>	<u>EINECS #</u>
Silicon Dioxide SiO ₂	65-72	14464-46-1	238-455-4
Aluminum Oxide Al ₂ O ₃	8-10	1344-28-1	215-691-6
Potassium Oxide K ₂ O	5-6	12136-45-7	235-227-6
Sodium Oxide Na ₂ O	10-12	1313-59-3	215-208-9
Lithium Oxide Li ₂ O	<1	12057-24-8	-
Magnesium Oxide MgO	-	1309-48-4	215-171-9
Calcium Oxide CaO	4-6	1305-78-8	215-138-9
Barium Oxide BaO	0,5-1,5	1304-28-5	215-127-9
Boron Trioxide B ₂ O ₃	-	1303-86-2	215-125-8
Titanium Dioxide TiO ₂	-	13463-67-7	236-675-5
Zirconium Oxide ZrO ₂	-	1314-23-4	215-227-2
Phosphorus Pentoxide P ₂ O ₅	-	1314-56-3	215-236-1
Other Oxides (CeO ₂ , CeF ₃)	<1	-	-
Tin Dioxide SnO ₂	-	18282-10-5	242-159-0

The material is a glassy inorganic solid that contains the above listed components. The product obtained by thermal treatment is inert and exhibits completely different properties as compared to the above listed single components. Coloration is achieved by treatment with inorganic pigments.

MATERIAL SAFETY DATA SHEET

According to EC Directives 91/155/EWG and 93/112/EEC

Date of Issue: 07.Feb.2007

Version: 001

Date of Print: 07. Feb. 2007

KLEMA

Willi Geller Creation® ZI-F

Page 2 of 4

2 Composition/Information on ingredients (continued)

Coloration: Total amount of pigments: 0,1-3,0%

Pigment	Manufacturer	Order #	Crystal system/Compound	CAS #
Pigment Orange Yellow	CERDEC AG	23 264	Vanadium Zirconia Yellow Baddeleyit	68187-01-9
Pigment Black	CERDEC AG	24 011	Iron Cobalt Chromium Spinel	68186-97-0
Pigment Havanna	CERDEC AG	230 214	Vanadium Zirconia Yellow Baddeleyit	68187-01-9
Pigment Brilliant Yellow	CERDEC AG	230 377	Zirconia Praseodymium Yellow Zircon	68187-15-5
Pigment Light Brown	CERDEC AG	260 028	Zinc Iron Chromium Brown Spinel	68186-88-9
Pigment Pink	CERDEC AG	270 404	Chromium Tin Pink Sphene	68187-12-2
Lumilux Gelbweiss Z-I	Riedel-de Haen	--	Y ₂ SiO ₅ , doped with Ce, Tb	12027-88-2

3 Potential hazards

NA

4 First-aid measures

After inhalation: Remove to fresh air, obtain medical attention for any breathing difficulty.
After contact with skin: Wash with soap and water. Get medical advice if irritation develops.
After contact with eyes: Wash thoroughly with running water. Get medical advice if irritation develops.
After ingestion (large amounts): Rinse mouth with water and seek medical advice, if necessary.

5 Fire-fighting measures

Suitable extinguishing media: water mist, foam, carbon dioxide, dry powder
Special hazards: Toxic metal oxide vapor may evolve upon intense heating.
Other information: No fire hazard

6 Accidental release measures

Methods for Cleaning up/taking up Pick up mechanically
Pick for disposal in tightly closed containers.

7 Handling and storage

Handling: According to manufacturers information.
Storage: Product must be stored in original container.

MATERIAL SAFETY DATA SHEET

According to EC Directives 91/155/EWG and 93/112/EEC

Date of Issue: 07.Feb.2007

Version: 001

Date of Print: 07. Feb. 2007

KLEMA

Willi Geller Creation® ZI-F

Page 3 of 4

8 Exposure control / personal protection

Exposure limits	MAK 6 mg/m ³
General protective measures :	Do not inhale dust
Hygiene measures:	Wash hands before breaks and after work.
Respiratory protection:	Dust mask
Hand protection:	Rubber gloves
Eye protection:	Safety glasses
Body protection:	NA

9 Physical and chemical properties

Appearance:	Fine powder of various colors
Odour:	odourless
Flash point:	NA
Ignition temperature:	NA
Lower explosion limit:	NA
Upper explosion limit	NA
Bulk density:	2,4 -3,1 g/cm ³
Solubility:	insoluble in water
Ph value:	Not applicable

10 Stability and reactivity

Thermal decomposition:	No decomposition if used as prescribed.
Hazardous decomposition products:	None
Other information:	The product is stable.

11 Toxicological information

Acute toxicity:	No data available.
Additional information	Toxicological investigations have not been performed yet.

MATERIAL SAFETY DATA SHEET

According to EC Directives 91/155/EWG and 93/112/EEC

Date of Issue: 07.Feb.2007

Version: 001

Date of Print: 07. Feb. 2007

KLEMA

Willi Geller Creation® ZI-F

Page 4 of 4

12 Ecological information

Elimination: Can be separated mechanically in public sewage plants.
Ecotoxic impact: No data available.
Additional information: No data available.

13 Disposal considerations

If recycling is impossible, dispose in accordance with local, state, and federal regulations for relatively nontoxic inorganics.

14 Transport information

Road transport
ADR not restricted
RID not restricted

Marine transport
IMDG/UN not restricted

Air transport
ICAO/IATA-DGR not restricted

Dispatch by post Permitted

15 Regulatory information

Labelling in accordance with GefStoffV/EC Hazard warning labeling not compulsory

16 Other information

This information is based on our present state of knowledge.
It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

**This MSDS is not subject to our regular update service.
It is forbidden by law to change the information within this MSDS**