

**CERAMCO**  
 MATERIAL SAFETY DATA SHEET  
 PFZ PRESS LINER

Issued on August 29, 2006

SECTION I - PRODUCT IDENTIFICATION

**PRODUCT NAME:** **PFZ Press Liner**

**MANUFACTURER/SUPPLIER:** DENTSPLY Ceramco  
 570 W. College Avenue  
 York, PA 17405-0872  
 USA  
 Phone number: (717) 699-4190

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Composition contains ceramic frits and inorganic pigments.

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

<b>Composition:</b>	<b>CAS-no.</b>	<b>R-phrases</b>	<b>Unit</b>	<b>Range</b>
- Silicone dioxide, SiO <sub>2</sub>	7631-86-9	R42/43/49	wt. %	30 - 36
- Aluminum oxide, Al <sub>2</sub> O <sub>3</sub>	1344-28-1	N/A	wt. %	8 - 12
- Potassium oxide, K <sub>2</sub> O	12136-45-7	N/A	wt. %	4 - 6
- Sodium oxide, Na <sub>2</sub> O	1313-59-3	R8/14/35	wt. %	2 - 4
- Tin oxide, SnO <sub>2</sub>	18282-10-5	N/A	wt %	6 - 15
- Cerium oxide, CeO <sub>2</sub>	1306-38-3	N/A	wt %	4 - 6
- Pigments and other elements < 1%	-	N/A	wt. %	2 - 13
1,3-Butanediol Xi	107-88-0	R 36/37/38	wt. %	20 - 30

SECTION III - HAZARDS IDENTIFICATION

**Acute health effects of the paste and dust during processing**

- Inhalation: Coughing, irritation.
- Ingestion: Coughing, irritation.
- Skin: Irritant
- Eyes: Irritant

**Carcinogenicity:** No carcinogenetic effects are known

**Medical conditions**

**aggravated by exposure:** None known

**Potential environmental effects:** None known

SECTION IV - 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

SECTION V- FIRE-FIGHTING MEASURES

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

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**SECTION VI - ACCIDENTAL RELEASE MEASURES**


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<b>Personal precautions:</b>	Avoid inhalation of dust during processing and contact with eyes or skin. Grinding and/or polishing only under adequate ventilation.
<b>Environmental precautions:</b>	None known.
<b>Containment techniques:</b>	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.
<b>Evacuation procedures:</b>	N/A
<b>Reporting requirements:</b>	N/A

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**SECTION VII - HANDLING AND STORAGE**


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<b>Handling:</b>	Grinding: object suction, do not inhale dust and vapors. No special precautions required, when used according to the instructions.
<b>Storage:</b>	Store closed and dry
<b>Shelf life:</b>	Ceramic paste opaque has a limited shelf life, see label.

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**SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION**


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<b>Applicable during processing</b>	
<b>General recommendations:</b>	General and local ventilation and exhaust filtration should be employed.
<b>Special precautions:</b>	No special precautions required, when used according to the instructions.
<b>Respiratory protection:</b>	Dust mask P1.
<b>Skin protection:</b>	Wear protective clothing and gloves.
<b>Eye protection:</b>	Wear safety glasses, with side protection
<b>Hygienic measures:</b>	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

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**SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES**


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<b>Specific properties</b>	<b>Unit</b>	<b>Range</b>
- Form	n.a.	paste
- Smell	n.a.	none
- Colour:	n.a.	brownish
- Density	g/cm <sup>3</sup>	1.8 - 2.0
- Solubility (ISO 6872)	µg/cm <sup>2</sup>	<100

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**SECTION X - STABILITY AND REACTIVITY**


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<b>Stability:</b>	Ceramic paste opaque has a limited shelf life, see label
<b>Conditions to avoid:</b>	Temperatures higher than 30°C
<b>Materials to avoid:</b>	Hydrofluoric acid (HF), ceramics dissolve in HF. Water, 1.3-butane diol is hygroscopic.
<b>Hazardous decomposition</b>	
<b>Products:</b>	No special information
<b>Hazardous polymerization</b>	
<b>Possible:</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

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**SECTION XI - TOXICOLOGICAL INFORMATION**


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

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SECTION XII - ECOLOGICAL INFORMATION

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When handled correctly there are no ecological effects to be expected.

The ceramic part is inert material, the amount of 1,3-butanediol is so small, < 1ml, that there is no danger for the environment

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SECTION XIII - DISPOSAL CONSIDERATIONS

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**Product:** None, the ceramic is inert material; the 1.3-butanediol quantity is so small that there is no risk.

**Packaging:** Disposal in accordance with local regulations, cleaning before disposal is not required.

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SECTION XIV - TRANSPORT INFORMATION

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This product is not subject to transport regulations.

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SECTION XV - REGULATORY INFORMATION

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**Symbol:** None

**R-Phrases:** None

**S-Phrases** : None

Because of the small quantity (1 ml) it is not required to mark the product label with the R&S phrases and safety symbols, according to TRGS 200 (<25 ml).

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SECTION XVI - OTHER INFORMATION

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See Ceramco PFZ Press instructions for use.

Changes, compared to the previous version, are marked with an \*.

This safety data sheet is according EU-directives 91/155/EEG, 93/112/EG and 2001/58/EG.