

**1. Chemical Product and Contact Information**

**Product Name:** Artiste<sup>®</sup> Nano Composite  
**Material Safety Sheet Number:** 00325  
 Date of Issue: 01/19/07  
 Revision Date: 09/16/09  
**Company Identification:** Pentron Clinical  
 1717 West Collins Ave.  
 Orange, CA 92867  
 Phone: 800-551-0283  
 203-265-7397  
**Emergency Information Chemtrec:** 800-424-9300  
**Chemtrec International:** 202-483-7616

**2. Composition/Information on Ingredients**

**Chemical characteristics:** A mixture of difunctional methacrylates of PCBisGMA, BisGMA, UDMA and HDDMA; barium boro-silicate glass\*, nano-particulated silica, zirconium silicate\*, photoinitiator, accelerator, stabilizer, silane and pigments.  
 \*contains a small amount of Al<sub>2</sub>O<sub>3</sub>  
**Description:** Same as above.  
**Hazardous components:** None Known.

Element	CAS #	Exposure Limit mg/m <sup>3</sup>	
		OSHA PEL	ACGIH TLV
PCBisGMA	N /A	N/E	N/E
BisGMA	1565-94-2	N/E	N/E
UDMA	74389-53-0	N/E	N/E
HDDMA	6606-59-3	N/E	N/E
Silane Treated Barium Boro-alumino Silicate Glass	N /A	N/E	N/E
Silane Treated Nano-particulated Silica	112965-52-5	Unknown	N/E
Zirconium Silicate	N /A	N/E	N/E
Pigments	Various	Unknown	Unknown
Photocuring system	Various	N/E	N/E

**3. Hazard Identification**

**Risk identification:** None known.  
**Special risks for human beings and environment:** People known to be allergic to methacrylate resins should avoid use of this material.  
**Classification:** Classification corresponds to actual EEC guidelines.

**4. First Aid Measures**

**General information:**  
**After skin contact:** Wash with plenty of soap and water.  
**After eye contact:** Rinse with water and consult an Ophthalmologist.  
**After swallowing:** Seek medical advice immediately.

**5. Fire Fighting Measures**

**Extinguishing media:** CO<sub>2</sub>, water.  
**Protective equipment:** Unknown.

**6. Accidental Release Measures**

**Personal precautions:** Protective gloves, goggles and others are recommended.  
**Environmental precautions:** Unknown.  
**Methods for cleaning up:** Wipe up with absorbent material.  
**Additional information:** Unknown.

**7. Handling and Storage**

**Storage:** Store at ambient temperature. Protect from light source.  
 Do not store in high heat areas. Store away from foodstuffs.

### 8. Exposure Controls/Personal Protection

Personal protective equipment:	Protective gloves and goggles are recommended.
General measure of protection and hygiene:	Normal hygienic measures.
Respiration:	Not applicable.
Hands:	Protective gloves.
Eyes:	OSHA approved goggles.

### 9. Physical and Chemical Properties

Appearance:	Form:	Viscous paste
	Color:	Tooth colored.
	Odor:	Slight ester-like odor.

Information on change in the physical state

Melting point/melting range:	Not applicable.
Boiling point/boiling range:	Not applicable.
Flash point:	Not applicable.
Autoignition temperature:	Unknown.
Danger of explosion:	Not likely.
Density:	c.a. 1.8-1.9 g/cm <sup>3</sup>
Vapor pressure:	Not applicable.
Viscosity:	Paste.
pH:	Not applicable.
Solubility in/miscibility with water:	None.
Content of solvents:	None.
Organic solvents:	None.
Water:	None.
Content of solids:	>70%

### 10. Stability and Reactivity

Stability:	Stable. Avoid heat, direct sunlight.
Incompatibility with other substances:	Avoid peroxides, strong oxidizers, reducing agents and free radical initiators.
Hazardous decomposition products:	Not known.

### 11. Toxicological Information

Acute toxicity:	Allergic reaction to methacrylate by exposure to product is possible.
Primary irritation:	Not available.
Skin:	Irritating.
Eye:	Irritating.
Inhalation:	Not volatile.
Ingestion:	Possibly toxic when swallowed.
Sensitization of product:	Not observed.
Additional toxicological information:	Non-mutagenic.

### 12. Ecological Information

General information:	Unknown.
Classification of water endangerment:	Unknown.

### 13. Disposal Considerations

Disposal consideration:	Dispose in accordance with local, state, and federal regulations.
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### 14. Transport Information

RID/ADR:	Not a hazardous material.
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### 15. Regulatory information

Classification according to EEC guidelines:	No classification necessary to actual EEC guidelines.
National Prescriptions:	Unknown.
Classification according to VbF:	Not applicable.

### 16. Other Information

The information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof. Pentron Clinical however, makes no representations as to the completeness or accuracy of this information and supplies it on the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Pentron Clinical be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information.

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