

**1. Chemical Product and Contact Information**

**Product Name:** Simile® nano-hybrid composite  
**Material Safety Sheet Number:** 00203  
 Date of Issue: 02/10/00  
 Revision Date: 09/10/09  
**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 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 water and soap.  
**After eye contact:** Rinse with water and consult a physician.  
**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, 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

	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

	Allergic reaction to methacrylate by exposure to product is possible.
Acute toxicity:	Not available.
Primary irritation:	
Skin Contact:	Yes.
Skin absorption:	Unknown.
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

Product Recommendation:	Dispose in accordance with local, state, and federal regulations.
Disposal key number:	Unknown.
Uncleaned packaging:	Unknown.
Recommendation:	Unknown.

### 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

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