

# MATERIAL SAFETY DATA SHEET

January 5, 2009

## SECTION 1: PRODUCT IDENTIFICATION

**PRODUCT NAME:** DuraSeal Powder      **CHEMICAL NAME:** Poly Ethyl Methacrylate  
**MANUFACTURER:** Reliance Dental Mfg., Co., 5805 W. 117<sup>th</sup> Place, P.O. Box 38, Worth, IL 60482  
**TELEPHONE:** For Product Information: 708-597-6694      For Medical Information: 800-535-5053

## SECTION II - HAZARDOUS INGREDIENTS OF MIXTURES

HAZARDOUS COMPONENT	CAS REG. NO.	%	TLV	(UNITS)	PEL	(UNITS)
Particulates NOC	NE	< 99	10	mg/m <sup>3</sup>	15	mg/m <sup>3</sup>
Residual Monomers	NA	< 1	NA		NA	
Benzoyl Peroxide	94-36-0	< 3	5	mg/m <sup>3</sup>	5	mg/m <sup>3</sup>
Titanium Dioxide	13463-67-7	< 1	10	mg/m <sup>3</sup>	15	mg/m <sup>3</sup>
Mineral Pigment	68186-94-7	< 1	10	mg/m <sup>3</sup>	15	mg/m <sup>3</sup>
Mineral Pigment	1309-37-1	< 1	5	mg/m <sup>3</sup>	5	mg/m <sup>3</sup>
Azo Pigment	59487-23-9	< 1	NE		NE	
Azo Pigment	5567-15-7	< 1	10	mg/m <sup>3</sup>	10	mg/m <sup>3</sup>

## SECTION III - PHYSICAL DATA

**BOILING POINT:** NA      **SPECIFIC GRAVITY** (h<sub>2</sub>O=1): 1.25      **VAPOR PRESSURE:** NA  
**PERCENT VOLATILE W/W%:** NA      **VAPOR DENSITY** (AIR=1): NA      **EVAPORATION RATE** (=1): NA  
**SOLUBILITY IN WATER:** Insoluble      **APPEARANCE & ODOR:** Fine beige powder. Faint odor in bulk.

## SECTION IV: FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** 304°C/ 580°F      **FLAMMABLE LIMIT AIR VOL%:** Lower - NA Upper - NA      **AUTOIGNITION TEMPERATURE:** NE  
**EXTINGUISHER METHOD:** Water, carbon dioxide, dry chemical.      **SPECIAL FIRE FIGHTING PROCEDURES:** Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into air, producing a fire hazard and possible explosion hazard if exposed to ignition source.      **UNUSUAL FIRE AND EXPLOSION HAZARDOUS:** Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust. Firefighters should wear self-contained breathing apparatus.

## SECTION V - HEALTH HAZARD DATA

**PRIMARY ROUTES OF ENTRY:** Eyes or skin (no absorption); inhalation of dusts.      **CARCINOGENICITY:** Titanium Dioxide is listed as a possible carcinogen by IARC. None of the other components of this material are listed by IARC, NTP, OSHA, OR ACIGH as carcinogens.

**TARGET ORGANS:** For Polymer: None Listed. For decomposition product Ethyl Methacrylate Monomer: None Listed. For Benzoyl Peroxide: None Listed. For Titanium Dioxide: None Listed. For Mineral Pigment<sup>1</sup>: None Listed. For Mineral Pigment<sup>2</sup>: None Listed. For Azo Pigment<sup>1</sup>: None Listed. For Azo Pigment<sup>2</sup>: None Listed.      **EFFECTS OF OVER EXPOSURE:** It is not known to cause significant health problems. OSHA classifies this material as particulates not otherwise classified. Avoid inhalation of dust. Keep dust out of eyes to prevent possible irritation.      **EMERGENCY AND FIRST AID PROCEDURES: INHALATION:** Remove to fresh air. Get medical help if discomfort persists.      **EYES:** Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.      **SKIN:** Wash with soap and water. Get medical help if discomfort persists.      **INGESTION:** Rinse mouth out with water. Call doctor if amount was large.      **CLOTHING:** Wash thoroughly before reuse.      **TREATMENT:** Treat symptoms after thorough decontamination.

**HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:** Health: 1      Flammability: 1      Reactivity: 0  
Personal Protective Equipment: Gloves and Safety Glasses or Chemical Splash Goggles.

## SECTION VI - REACTIVITY DATA

**STABILITY:** Stable      **CONDITIONS TO AVOID:** Heating above 240°C, 464°F.      **INCOMPATIBILITY (MATERIALS TO AVOID):** Strong oxidizing agents.      **HAZARDOUS DECOMPOSITION PRODUCTS:** Methacrylate Monomers and Oxides of Carbon when burned.      **HAZARDOUS POLYMERIZATION:** Will not occur.      **CONDITIONS TO AVOID:** NA.

## SECTION VII - SPILL OR LEAK PROCEDURE

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills.      **ENVIRONMENTAL EFFECTS: ECOLOGICAL TOXICITY:** For Benzoyl Peroxide: Ecological Toxicity is not known.      **WASTE DISPOSAL METHOD:** Dispose in a landfill or incinerate according to Federal, State, and Local regulations.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION (SPECIFY TYPE):** Use type for Particulates Not Otherwise Classified, if needed.      **VENTILATION:** Use good local exhaust at processing equipment, including buffers, sanders, grinders and polishers.      **PROTECTIVE GLOVES:** If hot plastic is handled.      **EYE PROTECTION:** Safety glasses or chemical splash goggles.      **OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** High temperature processing equipment should be well ventilated.

## SECTION IX - SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in cool dry place. Keep container closed to prevent water absorption and contamination.      **OTHER PRECAUTIONS:** Wash face and hands thoroughly with soap and water after use and before eating, drinking, smoking or applying cosmetics.