

# MATERIAL SAFETY DATA SHEET

January 5, 2009

## SECTION 1: PRODUCT IDENTIFICATION

**PRODUCT NAME:** DuraTray Powder      **CHEMICAL NAME:** Poly Methyl 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	
DialkylPhthalate	84-66-2	< 15	5	mg/m <sup>3</sup>	5	mg/m <sup>3</sup>
Trade Secret	NA	< 5	10	mg/m <sup>3</sup>	6	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 white 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:** None of the components of this material are listed by IARC, NTP, OSHA, OR ACIGH as carcinogens.  
**TARGET ORGANS:** For Polymer: None Listed. For decomposition product Methyl Methacrylate Monomer: Nose, liver, and kidneys. For Dialkyl Phthalate: None Listed. For Trade Secret: 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:** High temperatures and strong oxidizing agents.

## 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:** **AQUATIC TOXICITY:** For Methyl Methacrylate Monomer: Estimate of 96 hours median Threshold limit (TLm<sub>96</sub>): 100-1000 ppm. Flathead minnows and goldfish TLm<sub>24</sub>: 420 ppm. Bluegills TLm<sub>24</sub>: 368 ppm.; For Dialkyl Phthalate: 96 hours (96-h) LC<sub>50</sub>, Flathead minnow: 10-100 ul/L. 96-h LC<sub>50</sub>, Water flea: 10-100 ul/L; 75 mg/l. 48-h LC<sub>50</sub>, Golden orfe (minnow): 53 mg/l 61 mg/l.      **OXYGEN DEMAND:** For Dialkyl Phthalate: COD: 2.10 g/g; 1.66g/g. BOD: 2.00 G/G.      **PLANT GERMINATION:** For Dialkyl Phthalate: No adverse effect at: Ryegrass: 10 ul/l/ Radish: 10 ul/l. Lettuce: 10 ul/l.      **PLANT SEEDLING:** For Dialkyl Phthalate: No adverse effects at: Marigold: > 100 ul/l. Radish: > 100 ul/l. Corn: > 100 ul/l. Lettuce: > 100 ul/l.      **WASTE DISPOSAL METHOD:** Contains a Dialkyl Phthalate, contaminated product may be a RCRA/OSHA hazardous waste (40 CFR Part 261 and 20 CFR Part 1910). Incinerate materials in accordance with 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.