

MATERIAL SAFETY DATA SHEET

October 10, 2011

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: Duralay Powder - Red **CHEMICAL NAME:** Methacrylate Polymer
MANUFACTURER: Reliance Dental Mfg., Co., 5805 W. 117th 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)
Polymer	9011-14-7	60.0-100.0	10 mg/m ³	15 mg/m ³
DialkylPhthalate	84-66-2	0.0-20.0	5 mg/m ³	5 mg/m ³
Benzoyl Peroxide	94-36-0	0.0-20.0	5 mg/m ³	5 mg/m ³

SECTION III - PHYSICAL DATA

BOILING POINT: NA **SPECIFIC GRAVITY (h₂O=1):** 1.25 **VAPOR PRESSURE:** NA
PERCENT VOLATILE W/W%: NA **VAPOR DENSITY (AIR=1):** NA **EVAPORATION RATE (=1):** ND
SOLUBILITY IN WATER: Insoluble **APPEARANCE & ODOR:** Fine red 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:** IARC list Benzoyl Peroxide as unclassifiable as to carcinogenicity to humans. 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 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 (TLm₉₆): 100-1000 ppm. Flathead minnows and goldfish TLm₂₄: 420 ppm. Bluegills TLm₂₄: 368 ppm.; For Dialkyl Phthalate: 96 hours (96-h) LC₅₀, Flathead minnow: 10-100 ul/L. 96-h LC₅₀, Water flea: 10-100 ul/L; 75 mg/l. 48-h LC₅₀, 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.