

# MATERIAL SAFETY DATA SHEET

January 5, 2009

## SECTION I - PRODUCT IDENTIFICATION

**PRODUCT NAME:** Duralay II Liquid      **CHEMICAL NAME:** Methyl Methacrylate Monomer Stabilized  
**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

**Components Material:** Methyl Methacrylate      **CAS NUMBER:** 80-62-6      **%:** 100  
**PEL (OSHA):** 100 ppm, 410 mg/m<sup>3</sup>, 8 Hr. TWA      **TLV (ACGIH):** 100 ppm 410 mg/m<sup>3</sup>, 8 Hr. TWA  
**INEOS recommended:** 50 ppm, 205 mg/m<sup>3</sup>, 8 Hr. TWA; 100 ppm, 410 mg/m<sup>3</sup> 15 min.

## SECTION III - PHYSICAL DATA

**Form:** Mobile liquid      **Color:** Clear, colorless      **Odor:** Characteristic strong and acrid odor      **Odor Threshold:** 0.5 - 1 ppm  
**Boiling Point:** 100.5 deg. C at 760 mm/Hg      **Melting Point:** -48 deg. C      **Vapor Pressure:** 28 mm/Hg at 20 deg. C      **Density:** 0.949 g/ml at 15.5 deg. C  
**Solubility in Water:** 1.6 WT% (20 deg. C)      **Solubility (Other):** Miscible with most organic solvents      **Partition Coefficient:** 1.38      **Vapor Density (Air 1):** 3.5

## SECTION IV - FIRE AND EXPLOSION DATA

**Flash Point:** 11.5 deg. C      **Flammable Limits in air, % by Volume:** Lower Limit - 2.1      Upper Limit - 12.5  
**Autoignition Temperature:** 421 deg. C, Fine mists are explosive below the flash point. Flammable Liquid. Vapor forms explosive mixture with air. **Extinguishing Media:** Foam, Dry Chemical, CO<sub>2</sub>. Water spray (by trained personnel). **Special Fire Fighting Procedures:** Keep personnel removed and upwind of fire. Full protective equipment, including self-contained breathing apparatus, is recommended. Cool containers of material with cold water spray. Fight fires from a safe distance or protected areas.  
**Transportation information (DOT):** I.D. #: UN1247; Hazard Class 3; Packing Group II; HMIS: H = 2, F = 3, R = 2

## SECTION V - HEALTH HAZARD DATA

**Eye:** Liquid and vapors can cause moderate irritation (tears, blurred vision and redness). **Ingestion:** Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain. **Inhalation:** High concentration is irritant to the respiratory tract and may cause dizziness, head ache and anesthetic effects. **Chronic (cancer) Information:** Prolonged and/or repeated exposure may lead to kidney, lung, liver, and heart damage. Unlikely to present a cancer hazard to man. **Teratology (Birth Defect) Information:** Developmental toxicity observed in animal tests but only at levels toxic to the mother. **Reproductive Information:** No information available but no adverse reproductive effects are anticipated.

**FIRST AID:** **Inhalation** - If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. **Skin Contact** - In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse. **Eye Contact** - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. **Ingestion** - If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## SECTION VI - REACTIVITY DATA

**Stability** - Unstable with heat. **Incompatibility with Other Materials** - Incompatible with oxidizing and reducing agents. Materials is a strong solvent and can soften paints and rubber. **Decomposition** - Decomposes with heat. Hazardous gases/vapors produced are carbon monoxide, carbon dioxide and smoke. **Other Hazardous** - Polymerization can occur. Conditions leading to polymerization are excessive heat, storage in absence of inhibitor, and inadvertent addition of catalyst. Contamination of product may also cause hazardous polymerization.

## SECTION VII - SPILL OR LEAK PROCEDURES

**Safeguards:** Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. **Initial Containment:** Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent material from entering sewers, waterways, or low areas. **Spill Clean Up:** Soak up with sand, oil dry or other absorbent, non-combustible material. Cleaned-up materials is a RCRA Hazardous Waste. **Waste Disposal Method:** Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system. Incinerate material in accordance with Federal, State /Provincial and Local requirements. Do not incinerate in closed containers. Do not allow materials to contaminate ground water systems.

## SECTION VIII: SPECIAL PROTECTION INFORMATION

**Eye/Face Protection:** Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying materials. **Respirators:** A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. **Protective Clothing:** Wear impervious clothing to prevent any contact with this product, such as gloves, apron, boots, or whole body suit. Nitrile rubber is better than PVC.

## SECTION IX - SPECIAL PRECAUTIONS

**Precautions to be taken in handling and storing:** Observe label precautions. Keep away from heat, sparks, flame, direct sunlight, and elevated temperatures. Close containers after each use. Wash thoroughly after handling and before eating or smoking.