

# MATERIAL SAFETY DATA SHEET

*Product Name:* LR White Resin and Accelerator  
*Catalog Number:* 12390, 12392, 12393, 12394, 12398  
*DOT Hazard Class:* Not Hazardous  
*MSDS Prepared:* 9/2011

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*Information on this MSDS furnished by:* London Resin Company, P.O. Box 29, Woking, Surrey GU21 1AE, England

## **HAZARDOUS COMPONENTS**

### **Components (Resin):**

Polyhydroxy substituted bisphenol A dimethacrylate resin	98.5%
Methacrylic Acid	0.6%
Benzoyl Peroxide	0.9%

### **Components (Accelerator):**

Polyethylene Glycol 400	60.0%
Dimethyl-p-toluidine	40.0%

## **TOXICITY DATA**

These resins are based on resins used in dental fillings. The dimethyl-p-toluidine is referred to in the NIOSH toxic substances inventory. However, in the concentration used in the final resin mix little toxic hazard exists, especially since the concentrations are of the same order as those used in dental resins cured in the mouth.

The resin is about 50% of an adduct of a large bifunctional bisphenol A methacrylate and hydroxy propyl methacrylate. The rest of the resin phase is a blend of high molecular weight methacrylates with a minimum ester group size of C6 and the major portion greater than C10. The reason we feel that these materials pose no toxic threat is twofold: **1)** For 20 years there has been on the market in the USA, a temporary crown and bridge material and a tray extension material called "TRIM" sold by Bosworth and Co., both of which contain a mixture containing 97.5% n-butyl methacrylate and 2.5% dimethyl-p-toluidine. This is cured in the mouth, in contact with oral mucosa and the dentist's fingers, and it has never been shown to be either toxic or sensitizing and is FDA approved. **2)** The large bisphenol A methacrylate is very similar to the basic resin used in composite filling material without problems for the past 20 years.

## **PHYSICAL AND CHEMICAL DATA**

There is no data available on this product for boiling point, melting point, vapor pressure, vapor density, solubility, specific gravity and evaporation rate.

***FIRE AND EXPLOSION HAZARD DATA***

**Flash Point:** 120°C

**Flammable Hazards:** Though the mixture contains peroxide, there is no risk of explosion. If excess accelerator is added, a high exotherm may result. This is only a risk if the container holding the mixture is not vented.

**Flammability:** The best measure of this risk is flash point, and for LR White this is given by us as being greater than 120°C. Therefore, although the mixture is combustible, we understand that it is not classified as flammable.

***EMERGENCY AND FIRST AID***

**Skin:** Wash skin after contact. Apply a moisturizing cream if large amounts have been spilled on the skin.

**Eye:** Flush eyes with water for at least 15 minutes. Consult physician if irritation persists.

**Ingestion:** Contact physician at once.

***REACTIVITY DATA***

No data available.

***SPILL, DISPOSAL AND STORAGE INFORMATION***

**Spill:** Collect material with absorbent material. Place in container for disposal.

**Disposal:** Dispose of resin and accelerator by combining the two in a well vented container. The resin will then cure with a little fuming as it exotherms and should be placed in a fume hood while this occurs. The cool resin is harmless and may be disposed of with other non-toxic waste. For disposal of accelerator consult federal, state and local regulations.

**Storage:** Store resin and accelerator in refrigerator when not in use.

***SECTION 313 SUPPLIER NOTIFICATION***

Not applicable

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