

# MATERIAL SAFETY DATA SHEET

## SYSTEM 1 ADHESIVE

### 1 - IDENTIFICATION

**Manufacturer:** Ormco Corporation  
**Address:** 1717 West Collins Avenue  
**City, State, Zip:** Orange, CA 92867  
**Telephone:** 1-800-854-1741  
**24-Hour Emergency:** Chemtrec 1-800-424-9300  
**Date Prepared:** September 20, 2001

### 2 - COMPOSITION INFORMATION

#### Hazardous Ingredients

	<u>CAS #</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Uncured Methacrylate Ester Monomers	N/A	N/A	N/A	20-35
Benzoyl Peroxide	94-36-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	1-2

#### Other Ingredients

Inert mineral fillers, fumed silica, activators and preservatives

### 3 - PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** N/D  
**Specific Gravity (H<sub>2</sub>O = 1):** 1.3  
**Vapor Pressure (mm Hg):** N/D  
**Vapor Density (AIR = 1):** N/D  
**Freezing/Melting Point:** N/D  
**Solubility in Water:** Insoluble  
**Appearance and Odor:** Colored paste with fruity ester-like odor

### 4 - FIRE AND EXPLOSION HAZARD DATA

**Flash Point (Method Used):** ND  
**Flammable Limits: LEL: ND UEL: ND**  
**Extinguishing Media:** Chemical foam, CO<sub>2</sub> or dry chemical  
**Special Fire Fighting Procedures:** Wear a self-contained breathing apparatus.  
**Unusual Fire and Explosion Hazards:** Heat can cause polymerization with rapid release of energy.

### 5 - REACTIVITY DATA

**Stability:** Stable if stored as directed.  
**Conditions to Avoid:** Heat, light, aging and contamination  
**Incompatibility (Material to Avoid):** Reducing and oxidizing agents, peroxides and amines  
**Hazardous Decomposition Byproducts:** Oxides of Carbon  
**Hazardous Polymerization:** May occur

### 6 - HEALTH HAZARD DATA

**Routes of Entry:**  
**Skin:** Prolonged or repeated exposure to uncured material may cause irritation or skin rash especially in sensitive individuals.  
**Eyes:** May cause irritation and damage if not removed promptly.  
**Inhalation:** Prolonged or excessive inhalation may cause respiratory tract irritation.  
**Ingestion:** Uncured material may be harmful or fatal if swallowed.  
**Carcinogenicity -** NTP: No  
**IARC Monographs:** No OSHA Regulated Carcinogen: No

### 7 - EMERGENCY FIRST AID PROCEDURES

**Skin:** Wash thoroughly with soap and water.  
**Eyes:** Flush with water for 15 minutes including under eyelids.  
**Inhalation:** Remove to fresh air. Get medical attention if discomfort persists.  
**Ingestion:** Rinse mouth out with water. Do not induce vomiting. Seek medical attention.

### 8 - PRECAUTIONS FOR SAFE HANDLING & USE

**Steps to be taken in case material is released or spilled:** Absorb spills with inert material. Keep spilled material out of sewers.  
**Waste Disposal Method:** Unpolymerized material may be RCRA hazardous waste. Incinerate uncured material in accordance with all federal, state and local regulations.  
**Precautions to be taken in handling and storing:** Store in a cool, dry place away from heat, light and ignition.

### 9 - CONTROL MEASURES

**Respiratory Protection:** Avoid prolonged or excessive breathing of vapors of uncured material.  
**VENTILATION:**  
**Local Exhaust:** Good general ventilation should be sufficient to control airborne levels of vapors released by uncured material.  
**Mechanical (General):** Good general ventilation recommended.  
**Protective Gloves:** Impervious rubber gloves recommended when contacting uncured material.  
**Eye Protection:** Safety glasses recommended.  
**Work/Hygiene Practices:** Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure to uncured material.

### 10 - TRANSPORTATION INFORMATION

This product is not regulated by DOT for ground transportation under the small quantity exemption per 49 CFR 173.4.

### 11 - SPECIAL INFORMATION

**HMSIS (Hazardous Material Identification System) Rating:**  
H2 F1 R2 PPE - Gloves and safety glasses.  
[HMSIS Hazard Index: 4 – Severe Hazard; 3 – Serious Hazard; 2 – Moderate Hazard; 1 – Slight Hazard; 0 – Minimum Hazard]

**Note:** Hazard information contained on this MSDS form relates only to material in its uncured state. Thorough biocompatibility and toxicity testing of the cured material and its extracts have demonstrated that the material is non-toxic.

**Note:** This MSDS was prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate.