

# MATERIAL SAFETY DATA SHEET

## OPTIBOND S

Single Component Dental Adhesive

### 1 - IDENTIFICATION

**Manufacturer:** Kerr Corporation  
**Address:** 1717 West Collins Avenue  
**City, State, Zip:** Orange, CA 92867-5422  
**Telephone:** 1-800-KERR-123  
**24-Hour Emergency:** Chemtrec 1-800-424-9300  
**Date Reviewed:** January 3, 2006

### 2 - COMPOSITION INFORMATION

#### Hazardous Ingredients

	<u>CAS #</u>	<u>PEL</u>	<u>TLV</u>	<u>%</u>
Ethyl alcohol	64-17-5	1000 ppm	1000 ppm	20-25

#### Other Ingredients

Alkyl dimethacrylate resins	55-60
Barium aluminoborosilicate glass	5-10
Fumed silica (silicon dioxide)	5-10
Sodium hexafluorosilicate	0.5-1

### 3 - PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** N/E  
**Specific Gravity (H<sub>2</sub>O = 1):** ~ 1.25  
**Vapor Pressure (mm Hg):** N/E  
**Vapor Density (AIR = 1):** N/E  
**Solubility in Water:** Partial for uncured material.  
**Appearance and Odor:** Pale yellow paste with a fruity odor.

### 4 - FIRE AND EXPLOSION HAZARD DATA

**Flash Point (Method Used):** 64 °F/18 °C (Ethanol)  
**Flammable Limits: LEL:** N/E **UEL:** N/E  
**Extinguishing Media:** CO<sub>2</sub> and dry chemical foam  
**Special Fire Fighting Procedures:** None  
**Unusual Fire and Explosion Hazards:** None

### 5 - REACTIVITY DATA

**Stability:** Stable  
**Conditions to Avoid:** Heat, sparks and open flame  
**Incompatibility (Material to Avoid):** Strong oxidizing agents  
**Hazardous Decomposition Byproducts:** Carbon monoxide, carbon dioxide  
**Hazardous Polymerization:** Will not occur

### 6 - HEALTH HAZARD DATA

**Routes of Entry:**  
**Skin:** May cause mild irritation.  
**Eyes:** May cause mild irritation.  
**Inhalation:** May cause irritation of the throat.  
**Ingestion:** May be poisonous by ingestion.  
**Carcinogenicity -** NTP: No  
**IARC Monographs:** No **OSHA Regulated Carcinogen:** No

### 7 - EMERGENCY FIRST AID PROCEDURES

**Skin:** Wash skin thoroughly with soap and water. Use hand cream.  
**Eyes:** Flush with water for 15 minutes. If irritation persists, seek medical attention.  
**Inhalation:** Remove to fresh air. If irritation persists, seek medical attention.  
**Ingestion:** Do not give liquids if person is unconscious. Seek medical attention.

### 8 - PRECAUTIONS FOR SAFE HANDLING & USE

**Steps to be taken in case material is released or spilled:** Dilute with water, wipe up with cloth and transfer to a suitable container for disposal.

**Waste Disposal Method:** Material should not be allowed to drain to sewers. Incinerate liquid in proper equipment. Dispose of in accordance with federal, state and local regulations.

**Precautions to be taken in handling and storing:** Store in a cool, dry place away from ignition sources.

### 9 - CONTROL MEASURES

**Respiratory Protection:** Not needed

#### **VENTILATION:**

**Local Exhaust:** Recommended to keep exposure under 1000 ppm.

**Mechanical (General):** Usually sufficient

**Protective Gloves:** Impervious gloves recommended

**Eye Protection:** Safety glasses with side shield

**Work/Hygiene Practices:** Handle in accordance with good personal hygiene and safety practices. These practices include avoiding unnecessary exposure to material.

### 10 - TRANSPORTATION INFORMATION

**Regulated:** DOT, IATA and IMO  
**Proper Shipping Name:** Ethanol Solution  
**Hazard Class:** 3  
**Identification Number:** UN 1170  
**Packing Group:** II  
**Label:** Flammable Liquid  
**Note:** See 49 CFR 173.4

### 11 - SPECIAL INFORMATION

**HMIS (Hazardous Material Identification System) Rating:**  
H0 F3 R0  
[HMIS Hazard Index: 4 – Severe Hazard; 3 – Serious Hazard;  
2 – Moderate Hazard; 1 – Slight Hazard; 0 – Minimum Hazard]

**Note:** Hazard information contained on this MSDS 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.