

# Materials Safety Data Sheet

## PROSEAL™ PIT AND FISSURE SEALANT

**IDENTITY** Trade Name: PACSEAL™ PIT AND FISSURE SEALANT  
Codes: Natural shade  
Chemical Description: Light-cured, glass-filled resin  
Product Use: Dental sealant

### SECTION I

Pac-Dent International, Inc.  
21038 Commerce Point Dr.  
Walnut, CA 91789

Phone Numbers:  
24 Hour Emergency: 1-800-535-5053  
Customer Service: 1-909-839-0888

Date Prepared: July 12, 2009

### SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS Number	PEL/TLV
Uncured Acrylate resins	-----	Not established
Silica, amorphous	112945-52-5	6 mg/m <sup>3</sup> / 10 mg/m <sup>3</sup>
Sodium fluoride	7981-49-4	2.5 mg/m <sup>3</sup> (as F)

DOT HAZARD CLASSIFICATION: Not regulated  
WHMIS CLASSIFICATION: D-2 possible irritant  
NFPA HMIS RATING: HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 1

### SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Specific Gravity: 1.575 Vapor Pressure: <1 mm Hg  
Vapor Density: 1 Evaporation Rate: Not available  
Solubility in water: Nil Odor Threshold: Not available  
Appearance and Odor: Thin paste, either natural tooth shade or off-white, both with faint characteristic odor.

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: not established Flammable limits: not established  
Extinguishing Media: Carbon dioxide, dry chemical, alcohol foam or water fog. Water spray may be used to keep fire exposed containers cool.

Special Fire Fighting Procedures: A self-contained breathing apparatus should be worn by fire fighting personnel. Cool exposed containers with water spray to prevent polymerization under fire conditions.  
Hazardous Combustion Products: Hazardous polymerization with heat build up and release of carbon monoxide, carbon dioxide and oxides of nitrogen may occur under fire conditions.

### SECTION V - REACTIVITY DATA

Stability: Stable Conditions to avoid: Temperature >100°F, intense light.  
Incompatibility: Reducing and oxidizing agents.  
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen.  
Hazardous Polymerization: None under normal conditions of use.  
Conditions to avoid: Temperature >100°F, intense light.

### SECTION VI - HEALTH HAZARD DATA

Summary of Acute Hazards: Minimal health hazard under normal conditions of dental practice. May be irritating to eyes, mucous membranes or skin.

Route of Exposure	Signs & Symptoms
Inhalation	May be irritating to mucous membranes
Eye Contact	May be irritating
Skin Absorption	Not applicable
Skin Contact	Primary route of exposure. May be irritating
Ingestion	May be irritating to mucous membranes.

Summary of Chronic Hazards: May be sensitizing, especially with prolonged and/or repeated exposure.

Carcinogenicity	None known
Teratogenicity	None known
Mutagenicity	None known
Reproductive Toxicity	None known.

### Emergency First Aid Procedures:

Inhalation	Move to fresh air. Administer oxygen or artificial respiration if required and seek medical attention.
Eye Contact	Flush eyes with running water for 15+ minutes. See medical attention.
Ingestion	Consult physician immediately.
Skin Contact	Wash skin with soap and water for 15+ minutes.

### SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE

Handling and Storage Precautions: Avoid temperature extremes, light and moisture.  
Release or Spill: Absorb / wipe up spill with suitable material; collect for disposal.  
Waste Disposal Method: Follow all government regulations.  
Other Precautions: None

### SECTION VIII - CONTROL MEASURES

Respiratory Protection: None required.  
Ventilation: No special ventilation recommended under anticipated conditions of normal use.  
Protective Gloves: Recommended  
Eye Protection: Safety glasses or goggles are recommended.  
Other Protective Clothing or Equipment: Emergency eye wash fountain.  
Work/Hygienic Practices: Wash hands after use.

*The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Pac-Dent International, Inc. bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.*

PacSeal™  
PIT & FISSURE SEALANT  
LIGHT CURE - FLUORIDE-RELEASING

ProSeal™ bonds chemically and micromechanically to slightly moist teeth. It is tooth integrating and margin-free, providing an exceptional seal against microleakage.  
**ALWAYS APPLY PACSEAL TO A SLIGHTLY MOIST TOOTH SURFACE.**

### INSTRUCTIONS FOR USE

Slightly moist surfaces exhibit neither dryness nor pooling of water. Lightly dry and remove excess water with compressed air or a cotton pellet. Surfaces should be shiny or glossy. Overly wet surfaces will result in decreased bond strength.

1. Thoroughly clean enamel surfaces with oil-free cleaning paste.
2. Rinse well, removing all residual paste from pits and fissures.
3. Prepare questionable enamel in the usual manner.
4. Isolate treatment area and dry lightly with oil-free compressed air.
5. Apply PacEtch™ 38% phosphoric acid etching gel to the clean tooth surface for 15 seconds. Rinse well. Do not disturb this surface.
6. Lightly dry and remove excess water with a cotton pellet or clean compressed air. LEAVE TOOTH SURFACES SLIGHTLY MOIST. Moist surfaces should appear shiny or glossy. Overly wet surfaces will result in reduced bond strength.
7. PacSeal™ bonds to surfaces slightly moist from saliva; however, it is best to avoid bacterial contamination.
8. Place applicator tip securely on PacSeal™ syringe and carefully start flow of sealant. Use a new applicator tip for each patient. Recap syringe after use.
9. Apply PacSeal™ to the prepared tooth surface. For pit and fissure sealing, flow the material from cusp to cusp, but do not cover the marginal ridges.
10. Light cure. Cures with all lights. Curing time for a halogen light with a minimum of 300mW/cm<sup>2</sup> is 20seconds. More powerful lights will cure faster.
11. Check and adjust occlusion, if necessary.

### INDICATIONS AND PRECAUTIONS

- CAUTION: Sealants may be indicated for children and adults who
  - for a variety of reasons, may be at moderate or high risk of developing dental caries;
  - have incipient caries (limited to enamel of pits and fissures);
  - have existing pits and fissures that are anatomically susceptible to caries;
  - have sufficiently erupted permanent teeth with susceptible pits and fissures.
- CAUTION: The etching solution contains phosphoric acid; therefore, contact with skin, oral mucosa, eyes and dentin should be avoided. In case of contact, the affected area should be flushed with water immediately.

   
Pac-Dent International, Inc.  
21038 Commerce Point Dr.  
Walnut, CA 91789  
Made in USA

  
PacDent International, Inc.  
passion for excellence...  
Frank Dental GmbH  
Friedenstrasse 22B  
Loft 38, 81671  
München, Germany

Front

Back

Material Safety Data Sheet  
may be used to comply with  
OSHA's Hazard Communication Standard  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

U.S. Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)

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Identify (As used on Label and List)

Product Name: **ProSeal®** Light Cure Pit & Fissure Sealant

Item # PD-138

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### **SECTION I**

Pac-Dent International, Inc.  
21038 Commerce Point Dr.  
Walnut, CA 91789

Phone (909) 839-0888  
Fax (909) 839-0881  
Revised: Oct. 17, 2009

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### **SECTION II Hazardous Ingredients/Identify Information**

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY: COMMON NAME (S)):

Bisphenol A Diglycidyl Methacrylate, Triethylene Glycol Dimethacrylate, both in Composite and Bonding Agent, and Phosphoric Acid in etchant.

TLV: Not Available

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### **SECTION III Physical/Chemical Characteristics**

APPEARANCE: Thin clear liquid.

ODOR: Faint Resin Odor.

MELTING POINT: N/A

SOLUBILITY: Negligible

VAPOR DENSITY: N/A

SPECIFIC GRAVITY: N/A

BOILING POINT: N/A

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### **SECTION IV Fire and Explosion Hazard Data**

FLASH POINT: N/A

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Foam, carbon dioxide or dry material.

SPECIAL INFORMATION: None

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### **SECTION V Reactivity Data**

STABILITY: Stable

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Dioxide, low molecular weight Hydrocarbons and organic acids.

HAZARDOUS POLYMERIZATION: May Occur

INCOMPATIBILITIES: Strong acid, Peroxides and other oxidizing agents.

CONDITIONS TO AVOID: High Temperature, prolonged storage above 35°C, direct sunlight, and high intensity light.

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#### **SECTION VI - Health Hazard Information**

CARCINOGENICITY: None Known

SIGNS OR SYMPTOMS OF EXPOSURE: Irritation, Dyspepsia, Nausea, and Vertigo.

#### **FIRST AID MEASURES**:

Inhalation -	If overexposure occurs and symptoms appear, consult a physician.
Ingestion -	If substantial quantities are involved, or in case of noticeable discomfort, drink large quantities of water and consult physician immediately.
Skin Contact -	Flush with water; consult physician in case of lasting noticeable skin response.
Eye Contact -	Flush immediately with copious amounts of water, consult a physician if irritation or disturbance in vision occur.

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#### **SECTION VII - Precautions for Safe Handling and Use**

HANDLING PRECAUTIONS: Keep materials capped all the time after use.

SAFE STORAGE CONDITIONS: Avoid storage at storage at elevated temperatures.

OTHER RESTRICTIONS OR RECOMMENDATIONS: In case of material spill or release, absorb with inert materials such as dry sand and place in closed container for disposal as solid waste. If large quantities are involved, check State and Local regulations.

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#### **SECTION VIII - Control measures**

VENTILATION SYSTEM: Not required

SKIN AND EYE PROTECTION: Not required if handled with caution.

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Storage: Store at room temperature.

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Info herein is given in good faith as authoritative and valid. However, no warranty, expressed or implied, can be made and we assume no liability resulting from its use.