Section 1: Identification

**Product Name:** PacEndo™ Chlorhexidine  
**Product Use:** Irrigate and cleanse root canal systems after endodontic instrumentation  
**Manufacturer:** Pac-Dent International Inc.  
**Address:** 670 Endeavor Circle, Brea, CA 92821

**Phone:** (909) 839-0888  
**Fax:** (909) 839-0881

24 HR. Emergency Telephone Number CHEMTREC (North America) : 800-424-9300  
24 HR. Emergency Telephone Number CHEMTREC (International) : +1 (703) 527-3887

Section 2: Hazard(s) Identification

2.1. **GHS Classification:**

<table>
<thead>
<tr>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity, Oral</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2. **GHS Label:**

OSHA HCS 2012

**WARNING**

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>H303: May be harmful if swallowed</td>
<td>P264: Wash hands thoroughly after handling</td>
</tr>
<tr>
<td>H316: Causes mild skin irritation</td>
<td>P280: Wear protective gloves / eye protection</td>
</tr>
<tr>
<td>H320: Causes eye irritation</td>
<td>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td></td>
<td>P302+P352: IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
</tbody>
</table>

Refer to Section 15.2 for full text of EU Classifications and R/S Phrases.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Components</th>
<th>CAS #</th>
<th>EINECS</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorhexidine Gluconate</td>
<td>18472-51-0</td>
<td>unlisted</td>
<td>2%</td>
</tr>
<tr>
<td>Surfactant</td>
<td>N/A</td>
<td>unlisted</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

4.1. Description of first aid measures

**Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid, if irritation persists.

**Skin Contact:** Wash with soap in water.

**Inhalation:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, remove to fresh air and obtain medical attention if cough or any other symptoms develop.

**Ingestion:** Give large volumes of water. Do not induce vomiting. Obtain medical attention or consult a physician if ingested in large amounts.

4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Mild irritation/redness in eyes or on skin after contact. Very hazardous in case of ingestion. Non-corrosive for skin. Non-sensitizer for skin. Non-permeator by skin.

4.3. Indication of immediate medical attention and special treatment needed

Consult a physician or contact Poison Control Center if chemical solution is ingested in large amounts. Physicians are required to treat victim symptomatically.

Section 5: Fire-Fighting Measures

5.1. Suitable Extinguishing Media:

Use dry chemical, foam, or carbon dioxide to extinguish fire.

5.2. Fire Fighting Procedures:

Do not flush down sewers or other drainage systems. Exposed firefighters must wear NIOSH-approved positive pressure, self-contained breathing apparatus with full-face mask and full protective clothing.
5.3. **Unusual Fire and Explosion Hazards:**

Thermal decomposition may produce toxic fumes of ammonia, hydrogen chloride, and oxides of carbon and nitrogen.

5.4. **Combustion Products:**

Ammonia and nitrogen oxides under fire conditions.

---

**Section 6: Accidental Release Measures**

6.1. **Personal Precautions, Protective Equipment, and Emergency Procedures**

Wear proper personal protective equipment as indicated in Section 8. Follow instructions listed in Section 6.3 to follow clean up procedures.

6.2. **Environmental Precautions**

Follow all government regulations for waste disposal. Prevent release to the environment if possible. Do not flush waste into sewer or waterways.

6.3. **Methods and Materials for Containment and Cleaning Up**

- **Small Spills:** Wipe up small amounts with chemical resistant or damp rag which is washed with large amounts of water after each use. After cleaning, flush away traces with water.

- **Large Spills:** Absorb with inert, damp non-combustible material, then flush area with water.

---

**Section 7: Handling and Storage**

7.1. **Handling**

For intraoral use only by trained and experienced dental professionals. Follow good hygiene practices. Do not smoke, eat or drink while using. Use suitable protective equipment when handling. Wash thoroughly after handling and avoid any chemical contact with eyes, skin, and clothing. Keep container tightly closed to avoid inhalation or accidental ingestion. Use with adequate ventilation when necessary.

7.2. **Storage**

Store in a tightly closed container. Store container at room temperature in a cool, dry, well-ventilated area away from incompatible substances. Keep containers upright when not in use. Shelf life is thirty months from date of manufacture, provided that it is stored properly. Store at room temperature between 15⁰-30⁰C (59⁰-86⁰F).
Section 8: Exposure Controls/Personal Protection

8.1. Exposure Limits / Engineering Controls

<table>
<thead>
<tr>
<th>Chemical Components</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA –Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorhexidine Gluconate</td>
<td>unlisted</td>
<td>unlisted</td>
<td>unlisted</td>
</tr>
<tr>
<td>Surfactant</td>
<td>unlisted</td>
<td>unlisted</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Engineering Controls: General ventilation recommended.

8.2. Personal Protective Equipment (PPE) Information

Eye Protection: Use proper protection – wear safety glasses, as a minimum.

Skin Protection: Wash thoroughly after handling.

Clothing Protection: Wear gloves. No extra needed under normal conditions of use.

Respiratory Protection: S38: In case of insufficient ventilation wear suitable respiratory equipment.

Section 9: Physical and Chemical Properties

9.1. Appearance / Color

Physical State: Liquid
Appearance: Clear liquid
Odor: Odorless or no characteristic odor
Odor Threshold: Not applicable

9.2. Important health, safety and environmental information

Flashpoint: Not applicable
Autoignition Temperature: Not applicable
Boiling Point: 100°C / 212°F
Melting Point: Not determined
Freezing Point: Not determined
Vapor Pressure, mm Hg: 17.535
Relative Density: Not determined
Vapor Density (Air=1): 0.62
Solubility in Water: Soluble
Decomposition Temperature: Not determined

Pour Point: Not applicable
Lower Flammability Limit: Not applicable
Upper Flammability Limit: Not applicable
Specific Gravity: 1.01
Evaporation Rate (Water=1): Not applicable
Viscosity: Not determined
Octanol/Water Partition Coefficient: Not determined
pH: 5.0-7.0
Molecular Weight: Mixture
Section 10: Stability and Reactivity

Chemical Stability: Stable.

Hazardous Polymerization: No.


Incompatible Materials: Strong oxidizing agents, strong alkalies and strong mineral acids.

Conditions to Avoid: None known.

Section 11: Toxicological Information

11.1. Signs and Symptoms of Overexposure

Eye Contact: May cause mild eye irritation and could aggravate pre-existing eye disease.

Skin Contact: May cause slight to moderate irritation.

Inhalation: No significant signs or symptoms indicative of any adverse health hazard.

Ingestion: Slightly toxic. Ingestion of large amounts may cause pain, nausea, stomach cramps, and vomiting.

11.2. Additional Toxicity Information

Target Organ(s): None known.

Chronic Effects: No information found.

Acute Toxicity: Slightly toxic.

Section 12: Ecological Information

No information available.

Section 13: Disposal Considerations


To minimize exposure, refer to section 8 (exposure controls/personal protection).
Section 14: Transport Information

14.1. U.S. Department of Transportation (DOT) (N/A = Not applicable)
Proper Shipping Name: N/A
Identification Number: N/A
Hazard Class: N/A
Packing Group: N/A
U.S. DPT Labeling Requirements: N/A
IATA Class: N/A
IATA Packing Group: N/A

Not a DOT controlled material (USA). Not regulated.

14.2. Other Transportation Information

By SEA (IMDG): Not regulated

By GROUND ~Canada (TDG): Not regulated

By AIR (IATA): Not regulated

Section 15: Regulatory Information

15.1. U.S. Federal Regulations

U.S. ~O.S.H.A. Status: This material is not hazardous under the criteria of the U.S. Federal Hazard Communication Standard.

Section 16: Other Information

National Fire Protection Association (NFPA) Ratings (estimated): This information is intended solely for the use of individuals trained in the NFPA system.

Health: 1
Flammability: 0
Reactivity: 0

Disclaimer: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. The information relates only to the specific material designated and does not relate to its use in combination with other materials or its use as to any particular process. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Pac-Dent International Inc. Products be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Pac-Dent International Inc. Products has been advised of the possibility of such damages.