

MATERIAL SAFETY DATA SHEET: *Pulpdent Etch-Rite Royale*

IDENTITY: Trade Name: Pulpdent *Etch-Rite Royale*
Codes: ER, ER6, ER12G, ER24, ER50, ER50R
Chemical Description: 37% Phosphoric acid in a soft gel base.
Product Use: Dental etching material

SECTION I

Pulpdent Corporation

80 Oakland Street

Watertown, MA 02472 USA

Date Prepared: December 1, 2004

Phone Numbers:

24 Hr. Emergency: (800) 535-5053

Customer Service: (800) 343-4342/ (617) 926-6666

SECTION II - HAZARDOUS INGREDIENTS

<i>Ingredients</i>	<i>CAS RN</i>	<i>PEL/TLV</i>
Phosphoric Acid	7664-38-2	1 mg/m ³ / 3 mg/m ³
DOT HAZARD CLASS/ID No:	Class 8, III / UN 1805	
WHMIS CLASSIFICATION:	Class E - Corrosive	
NFPA HMIS RATING: HEALTH: 2	FLAMMABILITY: 0	REACTIVITY: 0

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 135°C	Specific Gravity: 1.30	Vapor Pressure: 0.0285
Melting Point: 42°C	Solubility in water: Complete	Odor Threshold: n/a
Appearance and Odor: Dark blue gel with characteristic odor.		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not combustible Flammable limits: LEL N/A UEL N/A

Extinguishing Media: Use water spray to keep fire-exposed containers cool. Extinguish fire using agent suitable for surrounding fire.

Special Fire Fighting Procedures: Protective clothing; positive-pressure, self-contained breathing apparatus.

Hazardous Combustion Products: Phosphoric acid can react with metals to liberate hydrogen, a flammable gas. Combustion by-products include oxides of phosphorus.

SECTION V - REACTIVITY DATA

Stability: Stable Conditions to avoid: None

Incompatibility: Avoid contact with materials such as sulfides and sulfites which could release toxic gases. Avoid strong alkalis because high heat of reaction can generate steam. Avoid most metals because phosphoric acid can react to liberate hydrogen, a flammable gas.

Hazardous Decomposition Products: Toxic gases, steam, hydrogen (flammable), oxides of phosphorus.

Hazardous Polymerization: Does not occur. Conditions to avoid: None

SECTION VI - HEALTH HAZARD DATA

Summary of Acute Hazards: Corrosive material. Causes eye and skin burns. May not produce an immediate burning sensation upon skin contact, delaying awareness that contact has occurred.

Route of Exposure

Inhalation

Signs & Symptoms

None expected under normal conditions of use of this product. However, if inhaled as a mist or vaporized, it can be irritating to the respiratory tract.

Eye Contact

Corrosive. May cause burns or irritation.

Skin Absorption

Slightly toxic.

Skin Contact

Corrosive. May cause burns or irritation. May not produce an immediate burning sensation, delaying awareness that contact has occurred.

Ingestion

Corrosive. Slightly toxic. May cause burns or irritation to the mouth, throat or gastrointestinal tract.

Summary of Chronic Hazards: None known.

Carcinogenicity, Not known to be a carcinogen.

Teratogenicity, Mutagenicity, Reproductive Toxicity: None known

Emergency First Aid Procedures:

Inhalation

Remove to fresh air. Seek medical attention if symptoms persist.

Eye contact

Immediately flush with running water for 15 min. Get medical care.

Ingestion

Dilute with water/milk. Do not induce vomiting. Get medical attention.

Skin contact

Immediately flush with running water for 15 min. Get medical attention. Remove contaminated clothing, wash before reuse.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING & USE

Handling and Storage Precautions: Store tightly closed in cool, dry well-ventilated location away from heat sources and out of direct sunlight. Separate from alkalis and most metals.

Steps to Be Taken if Material is Released or Spilled: Wear gloves, chemical splash goggles. For small quantities (as in this product): absorb spill with dry paper towels. Place all material in chemical waste container for disposal. Flush spill area with water.

Waste Disposal Method: Follow all government regulations.

Other Precautions: Wash thoroughly after handling. Use with adequate ventilation. Keep container closed. Empty container retains vapor and product residue; observe all safeguards.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: Under normal conditions of use of this product, surgical masks worn by dental staff are adequate. If used *in vivo*, a high speed evacuation tip should be used to protect patient. When airborne limits are exceeded, wear NIOSH-approved respirator with full face piece.

Ventilation: No special ventilation required under normal conditions of use of this product. For larger quantities, local mechanical exhaust ventilation to keep TLV < 3 mg/m³.

Protective Gloves: Chemically resistant gloves. Eye Protection: Chemically resistant splash goggles.

Other Protective Clothing or Equipment: Long sleeves, apron, lab coat over clothing to protect skin. If used *in vivo*, use rubber dam around tooth to be etched and high speed evacuator tip or other protective devices for patient. Emergency eye wash fountain should be available.

Work/Hygienic Practices: Wash thoroughly after handling. Clean protective equipment before reuse.

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 Pulpdent Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.