

MATERIAL SAFETY DATA SHEET: Etch-Rite

IDENTITY: Trade Name: Pulpdent Etch-Rite Dental Etching Gel
Codes: ETCH, ET-TWIN, ET-6, ET-12, ET-24, ET-144, ET-50
Chemical Description: 38% Phosphoric Acid in a proprietary gel base.
Product Use: Dental etching material

SECTION I

Pulpdent Corporation
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Watertown, MA 02472 USA

Phone Numbers:
24 Hr. Emergency: (800) 535-5053
Customer Service: (800) 343-4342/ (617) 926-6666

Date Prepared: January 1, 2001

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS RN	PEL/TLV
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: 3	FLAMMABILITY: 0	REACTIVITY: 0

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 135°C	Specific Gravity: 1.380	Vapor Pressure: 0.0285
Melting Point: 42°C	Solubility in water: Complete	Odor Threshold: n/a
Appearance and Odor:	Clear 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 with using agent suitable for surrounding fire.

Special Fire Fighting Procedures: Wear protective clothing and 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

Eye Contact

Skin absorption

Skin Contact

Ingestion

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.

Corrosive. May cause burns or irritation.

Slightly toxic.

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

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

None known

Mutagenicity

None known

Reproductive Toxicity

None known

Emergency First Aid Procedures:

Inhalation

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

Eye contact

Immediately flush with plenty of water for 15 minutes. Get medical care.

Ingestion

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

Skin contact

Immediately flush with plenty of water for 15 minutes while removing contaminated clothing. Get medical attention. Wash clothing 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 and 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, the surgical masks usually 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, a NIOSH-approved respirator with full face piece is recommended.

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: Wear long sleeves, apron or 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. Mask all surrounding tissue. 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.

SECTION VI - HEALTH HAZARD DATA

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Route of Exposure	Signs & Symptoms
Inhalation	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. May cause burns or irritation to the mouth, throat or gastrointestinal tract. Slightly toxic.

Summary of Chronic Hazards	None known.
Carcinogenicity	Not known to be a carcinogen.
Teratogenicity	None known
Mutagenicity	None known
Reproductive Toxicity	None known

Emergency First Aid Procedures:

Inhalation	Remove person to fresh air. Seek medical attention if symptoms persist.
Eye contact	Immediately flush with plenty of water for 15 minutes. Get medical attention.
Ingestion	Dilute with water or milk. Do not induce vomiting. Get medical attention.
Skin contact	Immediately flush with plenty of water for 15 minutes while removing contaminated clothing. Get medical attention. Wash clothing before reuse.