

Oral

MET-ETCH™

Metal Etching Gel

DESCRIPTION: Oral Met-Etch is an acid etching gel that contains Hydrochloric and Nitric acids. The total acid concentration is 20%.

INDICATIONS: Oral Met-Etch is used to etch the surface of a metal restoration so that the composite may be successfully bonded to it. Oral Met-Etch is useful in repairing fractured bridges where large areas of metal are exposed. It can also be used for etching the wings of Maryland Bridges prior to the application of composite. Oral Met-Etch will **not** etch porcelain and certain alloys (see other side for more information).

Precautions: Oral Met-Etch contains strong acids. This product is very corrosive and can cause burns to the skin and eyes. To prevent contact with these areas, safety glasses and gloves should always be worn at all times when working with this material. Also, high volume suction should be used during the etching procedure to remove any fumes that may be emitted. If accidental contact occurs; flush area immediately with water and consult a physician.

DIRECTIONS FOR REPAIRING FRACTURED BRIDGES

- 1) Isolate the area with a rubber dam.
- 2) Grind the area to be etched with a diamond burr to remove loose porcelain or anything that might interfere with the etch.
- 3) Apply Oral Met-Etch to the metal with a plastic instrument, acid resistant brush, or use a dispensing needle to apply the gel directly. The thickness of the gel should be at least 1mm. Keep high volume suction in place during the etching process to remove any fumes. *Oral Met-Etch will change in color when the etching process is complete. If the metal to be etched is precious, the gel will turn a brown color in 1-3 minutes. If the metal is a non-precious alloy the gel will turn green in 8-10 minutes. No change in color indicates an alloy that cannot be chemically etched.*
- 3) When the gel turns a uniform brown or green, the etching is complete and the area should be rinsed while evacuating.

4) For additional retention, it may be necessary to etch the adjacent porcelain with Oral Ceram-Etch prior to the application of composite.

5) Following the etching procedure, dry with air and apply an unfilled resin to the etched metal surface. Follow with the proper restorative composites.

DIRECTIONS FOR ETCHING MARYLAND BRIDGES (CHAIRSIDE)

1) Apply a protective coat of wax on all areas that are not to be etched.

2) Apply a drop of Oral Met-Etch on the area to be etched and allow it to set at room temperature (25°C/78°F) until the gel turns the appropriate color for the type of alloy being etched. *Note: the color change will take longer outside the mouth because of the cooler temperature.* This process usually takes about 20-25 minutes for non-precious alloys and 1-5 minutes for gold alloys.

3) Rinse the gel from the bridge with tap water, then remove the wax. Either steam clean or place in a beaker filled with distilled water and clean ultrasonically for a few minutes.

| <i>ALLOY TYPE</i> | <i>ETCH QUALITY</i> | <i>COMMENTS</i> |
|---------------------------|---------------------|-----------------------------|
| Non-Precious (Ni, Cr, Be) | Excellent | Etches the best |
| Non-Precious (Ni, Cr) | Good | Heavier oxide than Be alloy |
| Gold (over 60%) | Excellent | |
| Gold (under 60%) | Good | Heavier oxide than 60%+ |
| Palladium (without Cu) | Good | |
| Palladium (with Cu) | Poor | Leaves very heavy oxide |
| Chrome-Cobalt | Poor | Not recommended for etching |