

DANVILLE

ORTHODONTIC PRIMER

H₂Ortho=Bond™

H₂Ortho=Bond is a solvent-free, single application, self-etching, light curable orthodontic primer that bonds to enamel, porcelain, and metal. H₂Ortho=Bond will work with light-cured, self-cured, and dual-cured resin cements. Use of etchant is not required.

For H₂Ortho=Bond to work optimally, it is important for the surface to be wet with water. IT IS CRITICAL THAT THE SURFACE BE WET, NOT JUST DAMP.

BRACKET BONDING STEPS

- Clean the enamel surface well with oil-free pumice or a Danville Microetcher™ loaded with OrthoProphy SA85 powder. The surface will then be ready to wet prior to priming.
- Wet the surface with a brush. There should be a visible layer of water on the surface; wet, not damp!
- Apply copious quantities of the H₂Ortho=Bond using a new micro-fiber brush with a scrubbing motion for at least 20 seconds.
- With a gentle air stream, move the primer around on the tooth, confining it to the area desired for another 10 seconds.
- Another 10 seconds of stronger air is now employed to thin the primer.
- Light cure the primer at least 10 seconds on each tooth involved. Light curing the primer will prevent “skating” of the composite laden bracket as it is maneuvered into proper position. Failure to light cure the primer will allow the bracket to move too freely on the surface of the tooth.
- All bracket pylons require a coat of the H₂Ortho=Bond to assure proper metal bonding. Apply H₂Ortho=Bond to dry mesh. Light cure this air thinned-coat.
- Apply bracket cement to each bracket pylon, position, remove excess at periphery and light cure at least 20 seconds at 800 mw/cm² halogen light or equivalent LED mwattage. For other cement types see Hint 4.

HELPFUL HINTS:

- The 5th Hand™ retractor will allow the orthodontist to keep lips and cheeks away from the surface being treated and frees up the assistant to suction the tongue area. The 5th Hand will hold Dri Angles (cheek shields) over Stensen’s Duct thereby keeping saliva flow at a minimum.
- Non-enamel substrates such as composite, porcelain, and metal should be roughened prior to H₂Ortho=Bond application and may require additional treatment. Alumina delivered at low pressure (2.1 – 3.5 bar, 30 – 50 psi) from a MicroEtcher is a convenient method. Porcelain should be treated with S-Bond according to its instructions. H₂Ortho=Bond can be applied directly to the dry, prepared surfaces (water not required).
- Low retention or smooth brackets can also be roughened and their bond enhanced using H₂Ortho=Bond as in Hint #2.
- Prior to using self-cure or dual-cure bracket cements, apply Prelude™ Dual/Self-Cure Link to the H₂Ortho=Bond coat for assurance of compatibility.
- Cover resin bracket cements with Liquid Lens™ prior to curing to produce a fully cured composite surface without tacky air-inhibited layer.

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- All bracket pylons require a coat of the H₂Ortho=Bond to assure proper metal bonding. Apply H₂Ortho=Bond to dry mesh. Light cure this air thinned-coat.
- Apply luting/primer paste to each bracket pylon, position, remove excess at periphery and light cure at least 20 seconds at 800 mw/cm² halogen light or equivalent LED mwattage.

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- Cover resin bracket cements with Liquid Lens™ prior to curing to produce a fully cured composite surface without tacky air-inhibited layer.

- To cleanly dispense H₂Ortho=Bond, hold the bottle with the tip straight down (not at an angle) and squeeze gently. Release the grip on the inverted bottle to pull the primer back into the bottle and return it to the upright position. Replace cap firmly after use. Use within 30 minutes of dispensing and protect from light prior to use.
- Cement remaining on the tooth surface can be removed with the DM abrasive points used at 100,000 rpm with water. They will not cut enamel and will polish the underlying enamel as they remove the composite. FlashBusters™ composite fiber burs used in a low speed at 20,000 rpm make great finishing points after the bulk is removed.
- Storage: Protect from sunlight and excessive temperatures (>85°F). Refrigeration will extend the shelf life. Use at room temperature. See component labels for specific expiration dates.
- Cautions: H₂Ortho=Bond contains methacrylate monomers. Unpolymerized monomers may cause skin sensitization in susceptible persons. In case primer contacts the skin, wash thoroughly with soap and water.

MATERIAL SAFETY DATA SHEET
Revision Date 01.12.2011

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product Name: H₂Ortho=Bond
Company:
Danville Materials
3420 Fostoria Way Ste A-200
San Ramon, CA 94583
Phone:
800.827.7940
925.973.0710
Fax:
925.973.0764

SECTION II

COMPOSITION/INFORMATION ON INGREDIENTS

ND= Not Determined, NA= Not Applicable, NL= Not Listed

HAZARDOUS COMPONENTS

Item (CAS# or UN#)	CAS #	Exposure limits	%
none			

OTHER COMPONENTS

Alkyl Dimethacrylate Resins, various		NL	<80
Alkyl Triacrylate Resin	28961-43-5	NL	<20
Alkyl Phosphate Dimethacrylate	Proprietary	NL	<20

SECTION III

PHYSICAL DATA

Vapor Pressure mm HG: ND
Evaporation Rate (Ether = 1): ND
Solubility in H₂O: Partial (for uncured material)
Appearance and Odor: Clear yellow fluid with acrylic odor.
Specific Gravity (H₂O = 1): 1.122

SECTION IV

FIRE AND EXPLOSION

Flash Point: ND
Extinguishing Media: Carbon Dioxide, foam, dry chemical

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Extinguishing Media: Carbon Dioxide, foam, dry chemical

Special Fire-Fighting Procedures: Firefighters should wear self-contained respiratory devices.
Flammable Limits: ND
Unusual Fire and Explosion Hazards: None

SECTION V

REACTIVITY DATA

Stability: Unstable (reactive) upon depletion of inhibitor
Conditions to avoid: Heat, light exposure.
Incompatibility: Strong oxidizing agents.
Hazardous Decomposition Products: Acrid smoke, carbon monoxide, carbon dioxide and phosphorous oxides may be released during a fire.
Hazardous Polymerization: May occur upon exposure to light where large quantities of material are involved.

SECTION VI

HEALTH HAZARDS

OSHA Permissible Exposure Limits: None
Other Exposure Limit Used: None
ACGIH Threshold Exposure Limit: None
Chronic, Other: Target organs: Liver and Kidneys
Acute Overexposure: Irritation to eyes, skin, mucous membranes, and upper respiratory tract. Uncured acrylate and methacrylate resins may cause skin sensitivity or allergic response in select individuals. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Medical Conditions generally aggravated by exposure: Open sores or wounds of skin or mucous membrane. Individuals known to have allergic response to acrylates and methacrylates commonly used in dental restorative products.
Hygienic Practices: Keep away from foods and beverages. Avoid contact with eyes and skin. Use in area with good ventilation.
Primary Route(s) of Exposure: Eyes, Skin, Inhalation, or Ingestion

SECTION VII

EMERGENCY AND FIRST AID PROCEDURES

Signs of Exposure: Severe skin or eye irritation, redness or burning sensation.
Eyes: Although no appropriate human or animal health effects data are known to exist, this material is expected to cause eye irritation. Rinse immediately with plenty of water and seek emergency medical attention.
Skin: Although no appropriate human or animal health effects data are known to exist, this material is expected to be a slight skin absorption hazard and skin irritant. Product exposure may cause delayed skin irritation, blistering, and an allergic skin reaction (sensitization) in susceptible individuals upon repeated exposure. Remove contaminated clothing. Wash off affected area with soap and water. Flush for 15 minutes. Seek medical attention if ill effect or irritation develops.
Inhalation: Although no appropriate human or animal health effects data are known to exist, aerosols of this material may cause irritation to the respiratory tract and to other mucous membranes causing coughing, mucous production and shortness of breath. If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration, if needed. Seek immediate medical attention and carry container with label.
Ingestion: Product is not expected to present a significant ingestion hazard under anticipated conditions of normal use. Obtain medical attention as needed.

SECTION VIII

SAFE HANDLING & USE PRECAUTIONS

Spill Management: Use inert absorbent (e.g. vermiculite) to collect the material. Wash contaminated surfaces with soap and water. Avoid contact. Ensure adequate ventilation.
Waste Disposal Methods: Dispose of safely in accordance with local, state, and federal regulations. Avoid temperatures in excess of 40°C. Do not allow product to reach sewage system.

Special Fire-Fighting Procedures: Firefighters should wear self-contained respiratory devices.
Flammable Limits: ND
Unusual Fire and Explosion Hazards: None

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93346 REV A



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