GENERAL DESCRIPTION

A versatile, ultra-durable, industrial maintenance, water-borne acrylic, Break-Through! is formulated to bond to some of the most difficult substrates including fiberglass, ceramic tile, laminate, and many plastics. The interior/exterior satin finish offers very fast dry and outstanding early block resistance for increased productivity with less down time. Break-Through! provides hardness similar to or better than standard alkyds but maintains flexibility to endure extreme bends and deformation without cracking and peeling. Break-Through! is ideal for doors, windows, shelving, fixtures, trim, wood and concrete floors.

RECOMMENDED SUBSTRATES

<table>
<thead>
<tr>
<th>Aluminum</th>
<th>Galvanized Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic Tile</td>
<td>Gypsum Wallboard-Drywall</td>
</tr>
<tr>
<td>Concrete</td>
<td>Interior Wood</td>
</tr>
<tr>
<td>Concrete/Masonry Block</td>
<td>Laminate</td>
</tr>
<tr>
<td>Ferrous Metal</td>
<td>Plaster</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>Vinyl and Architectural Plastics</td>
</tr>
</tbody>
</table>

PRODUCT DATA

| PRODUCT TYPE: Water-Borne Acrylic |
| SHEEN: Satin, 20-30 @60° |
| VOLUME SOLIDS*: 34% +/- 2% |
| WEIGHT SOLIDS*: 47% +/- 2% |
| WEIGHT/GALLON*: 10.2 lbs. (4.6 kg) +/- 0.2 lbs. (91 g) |
| VOC: <250 g/L (2.1 lbs./gal.) |

*Product data calculated on product V50-410.

COVERAGE: Approximately 400 sq. ft. (37 sq. meters) per U.S. gallon (3.78 L) on primed, smooth, nonporous surfaces.

- Wet Film Thickness: 4.0 mils
- Wet Microns: 102
- Dry Film Thickness: 1.4 mils
- Dry Microns: 36

Coverage figures do not include loss due to surface irregularities and porosity or material loss due to application method or mixing. Some colors, drastic color changes, or porous substrates may require more than one coat to achieve a uniform finish.

DRYING TIME:
- Dry time @ 77°F (25°C); 50% relative humidity.
  - To Touch: 15-20 minutes
  - To Handle: 1 hour
  - To Recoat: 2 hours
  - For Foot Traffic: 12 hours
  - For Forklift Traffic: 24 hours
  - To Full Cure: 7 days

Allow 24 hours before normal use. Drying times listed may vary depending on temperature, humidity, film build, color, and air movement.

CLEANUP:
- Clean tools with warm, soapy water.

DISPOSAL:
- Contact your local environmental regulatory agency for guidance on disposal of unused product. Do not pour down a drain or storm sewer.

FLASH POINT: Over 200°F (93°C)

FEATURES / BENEFITS

Features
- Outstanding Early Block Resistance
- Excellent Adhesion
- Very Good Hardness
- Very Quick Dry
- Excellent Flow & Leveling
- Flexible
- Resistant to Household Chemicals

Benefits
- Provides tack free film idea for doors, windows, cabinets, and shelving
- Bonds to a wide variety of difficult substrates
- Durability and hardness similar to or better than conventional alkyds
- Dry to touch in 15-20 minutes, reducing down time
- Provides enamel with a smooth finish
- Withstands bends with no cracking or peeling
- Ideal for use in areas requiring frequent cleaning with mild household cleaners or light duty industrial cleaners

Read Label and Safety Data Sheet prior to use. See other cautions on last page.
GENERAL SURFACE PREPARATION

Surface must be clean and dry. Remove all loose, peeling paint, dirt, mildew, grease, oil, chalk, rust, and any other surface contaminants. Blistering and peeling issues are commonly caused by moisture behind the paint film. Problems leading to excessive moisture in the substrate must be repaired prior to painting. Putty all nail holes and caulk all cracks and open seams. Sand all glossy, rough, and patched surfaces. Plaster, concrete, and masonry surfaces must be completely dry, free of efflorescence, and allowed to cure for 30 days prior to painting. Repaired surfaces or lightly stained areas may require additional coats. Prime all bare wood, drywall, plaster, metal, and porous surfaces with the appropriate primer.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust or fumes. LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a properly fitted NIOSH-approved respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

ALUMINUM: This substrate may present potential adhesion problems. Any coating applied directly to aluminum should be spot applied, allowed to cure overnight, and then evaluated for adhesion. If adhesion is good, the application may proceed.

CERAMIC TILE: No primer needed; sanding or etching with phosphoric acid is necessary. Topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

CONCRETE: New concrete and masonry should cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming with an alkali resistant primer. Painting glazed brick is not recommended due to potential adhesion problems.

CONCRETE/MASONRY BLOCK: Mortar should cure for at least 30 days and preferably 90 days prior to painting. Fill block with an appropriate block filler. Surfaces previously coated with water thinned cement-based paint must be prepared with extra care. If the material appears to be adhering tightly, a masonry sealer may be applied to seal the surface. Check adhesion by applying a piece of masking tape. If the sealer peels off and has loose particles, remove all chalking or crumbling material, re-seal and re-check adhesion.

FERROUS METAL: The surface must be cleaned thoroughly to remove any dust, rust, and surface contaminants, and then primed with a metal primer. No primer is required for interior applications.

FIBERGLASS: No primer needed; sanding or scuffing the surface is recommended. Primer and topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

GALVANIZED STEEL: Caution must be used when selecting coatings for use on all galvanized metal surfaces. These substrates may have a factory-applied stabilizer, which is used to prevent white rusting during storage and shipping. Such stabilizers must be removed by either brush blasting, sanding or chemical treatment prior to priming.

GYPSUM WALLBOARD-DRYWALL: Nails or screws should be countersunk, and they along with any indentations should be mudded flush with the surface, sanded smooth and cleaned to remove any dust, prior to priming and painting the substrate.

INTERIOR WOOD: Unpainted wood or wood in poor condition should be sanded smooth and wiped clean. Any knots or resinous areas must be primed before painting. Countersink all nails, putty flush with surface, then prime.

LAMINATE: No primer needed; sanding or scuffing the surface is recommended. Topcoat should be spot applied as directed, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed.

PLASTER: Plaster, hardcoat, skim coat, or other alkaline surfaces should be allowed to cure for at least 30 days and preferably 90 days prior to priming and painting. The pH of the substrate must be less than 10 before priming with an alkali resistant primer. Painting glazed brick is not recommended due to potential adhesion problems.

RECOMMENDED PRIMERS

<table>
<thead>
<tr>
<th>Surface Type</th>
<th>Primer Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>4020, 90-712</td>
<td></td>
</tr>
<tr>
<td>Ceramic Tile/Fiberglass/Laminate</td>
<td>Self-priming</td>
<td></td>
</tr>
<tr>
<td>Concrete</td>
<td>4-603XI, 17-921XI</td>
<td></td>
</tr>
<tr>
<td>Concrete/Masonry Block</td>
<td>6-7, 6-15XI</td>
<td></td>
</tr>
<tr>
<td>Ferrous Metal</td>
<td>4020, 90-712, 90-912</td>
<td></td>
</tr>
<tr>
<td>Galvanized Steel</td>
<td>4020, 90-712</td>
<td></td>
</tr>
<tr>
<td>Gypsum Wallboard-Drywall</td>
<td>6-2, 6-4, 9-900, 12-900XI</td>
<td></td>
</tr>
<tr>
<td>Interior Wood</td>
<td>6-2, 9-900, 12-900XI, 17-921XI</td>
<td></td>
</tr>
<tr>
<td>Plaster</td>
<td>4-603XI, 17-921XI</td>
<td></td>
</tr>
<tr>
<td>Vinyl and Architectural Plastics</td>
<td>Self-priming</td>
<td></td>
</tr>
</tbody>
</table>

LIMITATIONS OF USE

Apply only when air, surface, and product temperatures are between 50°F (10°C) and 90°F (32°C) and at least 5°F (3°C) above the dew point. It is important to maintain air and surface temperatures for 24 hours after application. Avoid painting in direct sunlight or on hot surfaces. Do not apply late in the day when dew and condensation are likely to form, or if rain is expected within 48 hours. Not recommended for exterior horizontal surfaces unless these surfaces can be protected from dew and rain for 7 days. Wait at least 7 days after painting before cleaning the surface with a non-abrasive, mild cleanser. Not recommended for polypropylene or polyethylene plastics, roofs, garage floors or concrete floors subject to hot tires, continuous water immersion environments, such as bathtubs, sinks, shower basins and pools. Not recommended for very flexible substrates subject to abuse; such as canvas, nylon rope or rubber. Do not use on large wood structures or the bodies of homes. PROTECT FROM FREEZING.
APPLICATION INFORMATION

Stir thoroughly before using and occasionally when in use. When using more than one can of the same color, intermix to ensure color uniformity.

USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN. Read all label and Safety Data Sheet (SDS) information prior to use. SDS are available through our web site or by calling 1-800-441-9695.

Application Equipment: Apply with a high-quality brush, roller, paint pad, or by spray equipment. During application, it is important to maintain a wet edge due to the quick dry of the product. Rinse brush with warm water periodically during extended brush application. Two coats are recommended for maximum durability.

Airless Spray: Pressure 1500 to 2000 psi; tip 0.009" to 0.013". Spray equipment must be handled with due care and in accordance with manufacturer’s recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

Brush: Polyester/Nylon Brush
Roller (nap roller cover): 3/16" - 3/8"

Thinning: No thinning required for airless spray application. Reduce 5-10% (up to 12 oz. or 355 mL) with water per U.S. gallon (3.78 L) of paint for conventional spray, HVLP, and brush applications.

Permissible temperatures during application:
- Material: 50 to 90°F 10 to 32°C
- Ambient: 50 to 90°F 10 to 32°C
- Substrate: 50 to 90°F 10 to 32°C

WARNING! HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT, EYE, AND SKIN IRRITATION. Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Contains material that can cause target organ damage. Do not breathe vapor or mist. Do not swallow. Do not get on skin or clothing. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Provide fresh air ventilation during and after application and drying. Avoid the inhalation of dust, particulates, spray, or mist arising from the application of this preparation. Use personal protective equipment as required. DANGER – RAGS, STEEL WOOL OR WASTE SOAKED WITH BREAK-THROUGH! INTERIOR/EXTERIOR SATIN WATER-BORNE ACRYLIC MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER. Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information. FIRST AID: If swallowed, rinse mouth with water (only if the person is conscious). Call physician immediately. Do not induce vomiting unless directed to do so by medical personnel. If in eyes, rinse with water for 15 minutes. Check for and remove any contact lenses. In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Get medical attention immediately. If inhaled, remove to fresh air. If experiencing respiratory symptoms, call a POISON CENTER or doctor/physician. Keep out of the reach of children. For workplace use, an MSDS is available from your retailer or by calling (412) 492-5555. EMERGENCY SPILL INFORMATION: (412) 434-4515 (U.S.)

© 2019 PPG Industries, Inc. All Rights Reserved. The PPG Logo and Break-Through! are registered trademarks of PPG Industries Ohio, Inc.

PPG Architectural Finishes, Inc. believes the technical data presented is currently accurate; however, no guarantee of accuracy, comprehensiveness, or performance is given or implied. Improvements in coatings technology may cause future technical data to vary from what is in this bulletin. For complete, up-to-date technical information, call 1-800-441-9695.