



Architectural Coatings

GENERAL DESCRIPTION

A versatile, ultra-durable 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 gloss 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, cabinets, shelving, hand rails, fixtures, trim and concrete floors.

RECOMMENDED SUBSTRATES

Aluminum	Galvanized Steel
Ceramic Tile	Gypsum Wallboard-Drywall
Concrete	Interior Wood
Concrete/Masonry Block	Laminate
Ferrous Metal	Plaster
Fiberglass	Vinyl and Architectural Plastics

CONFORMANCE STANDARDS

VOC compliant - lower than Federal AIM, OTC, LADCO and CARB 2000 SCM regulations

APPLICATION INFORMATION

Stir thoroughly before using and occasionally when in use. Prime all necessary surfaces with an appropriate PPG primer prior to application of the product. When using more than one container of the same color, intermix to ensure color uniformity. Do not mix with solvent-type paints or with paint solvents. USE WITH ADEQUATE VENTILATION. KEEP OUT OF REACH OF CHILDREN. Read all label and Material Safety Data Sheet (MSDS) information prior to use. MSDS are available through our website or by calling 1-800-441-9695.

Application Equipment: Apply with a high quality synthetic brush, roller, paint pad, or by spray equipment. Where necessary, apply a second coat.

Airless Spray: Pressure 2000 psi, tip 0.009" - 0.013". Best results are achieved using a fine finish tip. 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: High quality polyester/nylon brush

Roller: 3/16" - 3/8" nap roller cover.

Thinning: No thinning required for airless or air-assisted airless application. Reduce 5-10% with clean water for conventional spray, HVLP and brush applications.

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

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

Break-Through! 250 Interior/Exterior Gloss Water-Borne Acrylic

APPLICATION INFORMATION (continued)

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

TINTING AND BASE INFORMATION

Refer to the appropriate color formula book, automatic tinting equipment, and or computer color matching system for color formulas and tinting instructions. The bases can be tinted with 96 line or 896 colorants.

V70-610	White and Pastel Base
V70-620	Midtone*
V70-630	Deeptone*
V70-640	Ultra Deep*
V70-V	Clear
V70-5	Safety Red
V70-9	Gloss Black
V70-46	Safety Yellow

*Must be tinted before use.

Some colors, drastic color changes, or porous substrates may require more than one coat to achieve a uniform finish. Safety colors and high chroma colors should be tinted with 896 colorants for optimum performance.

PRODUCT DATA

PRODUCT TYPE:	Water-borne Acrylic
SHEEN:	Gloss: 70 to 75 (60° Gloss Meter)
VOLUME SOLIDS*:	37% +/- 2%
WEIGHT SOLIDS*:	49% +/- 2%
VOC*:	211 g/L (1.8 lbs./gal.)
WEIGHT/GALLON*:	10.3 lbs. (4.7 kg) +/- 0.2 lbs. (91 g)

*Product data calculated on product V70-610.

COVERAGE: Approximately 400 sq. ft./gal. (37 sq. m/3.78L) depending on surface texture and porosity.

Wet Film Thickness:	4.0 mils
Wet Microns:	102 microns
Dry Film Thickness:	1.5 mils
Dry Microns:	38 microns

Coverage figures do not include loss due to surface irregularities and porosity or material loss due to application method or mixing.

DRYING TIME: Dry time @77°F (25°C); 50% relative humidity.

To Touch:	15 to 20 minutes
To Handle:	1 hour
To Recoat:	After 2 hours
For Foot Traffic:	12 hours
For Forklift Traffic:	24 hours
To Full Cure:	7 days

Drying times listed may vary depending on temperature, humidity, color and air movement.

CLEANUP: Clean tools and spray equipment with warm, soapy water immediately after use.

FLASH POINT: Over 200°F (93°C)

GENERAL SURFACE PREPARATION

Surfaces to be coated must be dry, clean, sound, and free from all contamination including loose and peeling paint, dirt, grease, oil, wax, concrete curing agents and bond breakers, chalk, efflorescence, mildew, rust, product fines, and dust. Remove loose paint, chalk, and efflorescence by wire brushing, scraping, sanding, and/or pressure washing. Putty all nail holes and caulk all cracks and open seams. Sand all glossy, rough, and patched surfaces. Feather back all rough edges to sound surface by sanding. Prime all bare and porous substrates with an appropriate primer. On exterior surfaces, remove mildew by using PPG MILDEW CHECK® Multi-Purpose Wash, 18-1; or 1 part chlorine bleach to 3 parts water. Before use, be sure to read and follow the instructions and warnings on the label. **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. In Canada contact a regional Health Canada office. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

Aluminum: A primer is required for proper adhesion. 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.

Ferrous Metal: The surface must be cleaned thoroughly to remove any dust, rust, oil and surface contaminants, and then primed. No primer is required for interior applications.

Galvanized Steel: A primer is required for proper adhesion. 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.

Interior Wood: Unpainted wood or wood in poor condition should be sanded smooth, wiped clean, then primed. Any knots or resinous areas must be primed before painting. For non-bleeding or previously painted wood, no primer is required.

Concrete: New concrete 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 painting. If pH is greater than 10, prime with an alkali resistant primer.

Concrete/Masonry Block: Mortar should cure for at least 30 days and preferably 90 days prior to priming. Fill block with 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.

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, then prime prior to painting the substrate.

Plaster: Plaster or other alkaline surfaces should be allowed to cure for at least 30 days prior to priming with an alkali resistant primer.

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.

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.

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.

Vinyl & Architectural Plastics: Vinyl and similar architectural plastics may present potential adhesion problems. A primer may be required to promote proper adhesion. Consult the manufacturer's guidelines prior to painting. Primer and Topcoat should be spot applied, allowed to cure overnight, then evaluated for adhesion. If adhesion is good, the application may proceed. Do not paint vinyl or plastic with a color darker than the original to prevent potential warping due to heat absorption.

RECOMMENDED PRIMERS

Aluminum	6-204, 17-921, 90-712, 90-912
Ceramic Tile	Self-priming
Concrete	4-603, Self-priming
Concrete/Masonry Block	4-100, 6-7, 6-15
Ferrous Metal	6-208, 90-712, 90-912
Fiberglass	Self-priming
Galvanized Steel	6-209, 17-921, 90-712, 90-912
Gypsum Wallboard/Drywall	6-2, 6-4, 9-900, 12-900
Interior Wood	6-2, 9-900, 17-921, 12-900
Laminate	Self-priming
Plaster	4-603, 17-921
Vinyl & Architectural Plastics	Self-priming

PACKAGING

1-Gallon (3.78 L)

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LIMITATIONS OF USE

Apply only when air and surface temperatures are above 50°F (10°C) or above and when the air and surface temperatures will remain above 50°F (10°C) for the next 24 hours. Avoid exterior application late in the day when dew and condensation are likely to form or when rain is anticipated. Not recommended for exterior or 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. Do not use on large wood structures or the bodies of homes. Not recommended for very flexible substrates subject to abuse; such as canvas, nylon rope or rubber. **PROTECT FROM FREEZING.**

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, visit our web site or call 1-800-441-9695.



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