

Architectural Coatings

Break-Through! Interior/Exterior Satin Water-Borne Acrylic

GENERAL DESCRIPTION

A versatile, ultra-durable water-borne acrylic, *Break-Through!*, is formulated to bond to some of the most difficult substrates including fibreglass, 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 deformations without cracking and peeling. *Break-Through!* is ideal for doors, windows, shelving, fixtures, trim, wood and concrete floors.

RECOMMENDED SUBSTRATES

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

CONFORMANCE STANDARDS

Complies with the Canadian Volatile Organic Compound Concentration Limits for Architectural Coatings Regulations requirements.

Can earn LEED 2009 credit

LIMITATIONS OF USE

Apply only when air and surface temperatures are above 10 °C (50 °F) or above and when the air and surface temperatures will remain above 10 °C (50 °F) 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 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 use on cabinets or handrails.

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.

Permissible temperatures during the application:

Material:	10 to 32 °C	50 to 90 °F
Ambient:	10 to 32 °C	50 to 90 °F
Substrate:	10 to 32 °C	50 to 90 °F

Before use, be sure to read and follow the instructions and warnings on the label and Material Safety Data Sheet.

See other cautions on the last page.

TINTING AND BASE INFORMATION

Refer to the appropriate colour formula book, automatic tinting equipment, and/or computer colour-matching system for colour formulas and tinting instructions. The bases can be tinted with 96/9600 line or 896 colourants.

V51-410C	White and Pastel Base
V51-420C	Midtone*
V51-430C	Deeptone*
V51-440C	Ultra Deep*
V51-90C	Wrought Iron Black

*Must be tinted before use.

Some colours, drastic colour changes, or porous substrates may require more than one coat to achieve a uniform finish.

PACKAGING

3.78 L

PRODUCT DATA

PRODUCT TYPE:	Water-borne Acrylic
SHREEN:	Satin: 20 to 30 (60° Gloss Meter)
VOLUME SOLIDS*:	33% ± 2%
WEIGHT SOLIDS*:	44% ± 2%
VOC*:	< 50 g/L
DENSITY*:	1.2 kg/L

*Product data calculated on product V51-410C.

SPREADING RATE PER COAT Approximately 27.9 to 32.5 m² (300 to 350 ft²) per 3.78L depending on surface texture and porosity.

Wet Film Thickness: 4.0 mils (102 microns)

Dry Film Thickness: 1.3 mil (33 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 @ 25 °C (77 °F); 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, colour and air movement.

CLEANUP: Remove as much product quantity as possible and clean tools with lukewarm soapy water immediately after use.

DISPOSAL: Consult your municipality in order to dispose of paint residues according to environmental regulations.

Do not pour down a drain or storm sewer.

FLASH POINT: Over 93 °C (200 °F)

FEATURES / BENEFITS

Features	Benefits
Outstanding early block resistance	Provides tack-free film ideal for doors, windows, and shelving.
Excellent adhesion	Bonds to a wide variety of difficult substrates.
Very good hardness	Durability and hardness similar or better than conventional alkyds.
Very quick dry	Dry to touch in 15–20 minutes; reducing down time.
Excellent flow & levelling	Provides enamel smooth finish.
Flexible	Withstands bends with no cracking or peeling.
Resistant to household chemicals	Ideal for use in areas requiring frequent cleaning with mild household cleaners, or light duty industrial cleaners.

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.

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 regional Health Canada office. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

Remove mildew with a solution of household bleach (1 part household bleach to 3 parts of water). Prime all bare and porous substrates with an appropriate primer. Before use, be sure to read and follow the instructions and warnings on the label.

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. 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. Fill block with appropriate block filler.

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.

Fibreglass: 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 colour darker than the original to prevent potential warping due to heat absorption.

RECOMMENDED PRIMERS

Aluminum (exterior)	Dulux Weatherguard 1535
Ceramic Tile	Self-priming
Concrete	Self-priming, <i>Perma-Crete</i> 4-809C
Concrete/Masonry Block	<i>SpeedHide</i> 6-7C, Dulux X-pert 36250
Fibreglass	Self-priming
Galvanized Steel (exterior)	Dulux Weatherguard 1535
Gypsum Wallboard/Drywall	<i>SpeedHide</i> 6-2C, 6-4C, <i>Pure Performance</i> 9-900C, <i>SpeedHide</i> Pro EV 12-900XIC, Glidden Ultra 36600, Dulux X-Pert 11000, Dulux Lifemaster 59113
Laminate	Self-priming
Plaster	<i>Pure Performance</i> 9-900C, <i>SealGrip</i> 17-921XIC, <i>Dulux Gripper</i> 60000A
Vinyl & Architectural Plastics	Self-priming
Wood (interior)	<i>SpeedHide</i> 6-2C, <i>Pure Performance</i> 9-900C, <i>SealGrip</i> 17-921XIC, <i>Dulux Gripper</i> 60000A, <i>SpeedHide</i> Pro EV 12-900XIC.

APPLICATION INFORMATION

Stir thoroughly before use and occasionally when in use. Prime all necessary surfaces with an appropriate PPG primer prior to the application of the product. When using more than one container of the same colour, intermix to ensure colour uniformity. Do not mix with solvent-type paints or with paint solvents. USE WITH ADEQUATE VENTILATION. Read all label and Material Safety Data Sheet (MSDS) information prior to use. MSDS are available through our website or by calling 1 866 660-2220. KEEP OUT OF REACH OF CHILDREN.

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

Brush: High quality polyester/nylon brush.

Roller: 5 mm à 10 mm (3/16—3/8") nap synthetic roller cover.

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 the manufacturer's recommendation. High-pressure injection of coatings into the skin by airless equipment may cause serious injury.

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

PRECAUTIONS

Provide fresh air ventilation during and after application and drying. Use personal protective equipment as required. Keep out of the reach of children. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Prior to use, read and follow product-specific SDS and label information. Note: These warnings encompass the product series. **FIRST AID:** If swallowed, rinse mouth with water (only if the person is conscious). 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. If on skin, rinse well with water. Wash with soap and water. Get medical attention if irritation develops. If inhaled, remove to fresh air. If experiencing respiratory symptoms call POISON CENTRE or doctor/physician.

For workplace use, an SDS is available from your retailer or by calling 1 866 660-2220.

EMERGENCY SPILL INFORMATION: 1 514 645-1320 or 1 866 660-2220.

The PPG Paints Logo & Design is a trademark of PPG Industries Ohio, Inc. *Break-Through!* is a registered trademark of PPG Industries Ohio, Inc. *SpeedHide*, *SealGrip*, *Pure Performance* and *Gripper* are registered trademarks of PPG Architectural Finishes, Inc. Dulux is a registered trademark of AkzoNobel and is licensed to PPG Architectural Coatings Canada, Inc. for use in Canada only.

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 1 866 660-2220.



PPG Industries, Inc.
Architectural Coatings
One PPG Place
Pittsburgh, PA 15272
www.ppgpaints.com

PPG Architectural Coatings Canada Inc.
2505, rue de la Metropole
Longueuil (Quebec) Canada J4G 1E5

Technical Services 450 442-2220
1 866 660-2220
Fax: 450 679-8893
1 800 278-8893

Architect/Specifier
1-888-PPG-IDEA