



# ARBORCOAT®

## WATERBORNE EXTERIOR STAIN

### SEMI SOLID 639

#### Features

- Provides protection and color without obscuring the grain or texture of the wood
- The semi solid opacity of this product makes it ideal for reducing color variations in wood without completely obscuring the wood grain
- Provides mildew resistant coating
- Scuff resistant
- May be applied to new, pressure treated lumber. Ideal for softwoods like cedar and pine.
- Formulated to penetrate, protect, and beautify wooden decking and furniture
- A water repellent coating

#### Recommended For

Residential or commercial applications where a premium quality finish is desired. For exterior use on wood decking, fencing, siding, shakes, and furniture.

#### General Description

A premium quality 100% acrylic semi solid stain formulated to penetrate and protect wood, resist abrasion, and beautify wood decking, siding, fencing, shakes and furniture. Its colors are semi solid, allowing some of the color and the grain pattern of the wood to show through. Arborcoat® Semi Solid stain can be top coated with Arborcoat® Waterborne Protective Clear Coat (636) for a low lustre look.

#### Limitations

- Do not apply when air and surface temperatures are below 40 °F (4.4 °C).
- Moisture content of substrate must be below 15%. Test light colors over a small area for tannin bleed before proceeding.
- Not recommended for hardwood
- For a low lustre look, apply a single thin topcoat of Arborcoat® Waterborne Protective Clear Coat (636)

#### Product Information

<p><b>Colors — Standard:</b> None</p> <p><b>— Tint Bases:</b> White Base (01), Clear Tint Base (06) Tint with Benjamin Moore® Gennex® Colorants Only</p> <p><b>— Special Colors:</b> Contact your Benjamin Moore representative</p> <p><b>Certifications &amp; Qualifications:</b> VOC compliant in all regulated areas</p> <p><b>Technical Assistance</b> Available through your local authorized independent Benjamin Moore retailer. For the location of the retailer nearest you, call 1-866-708-9180 or visit <a href="http://www.benjaminmoore.com">www.benjaminmoore.com</a></p>	<table border="1"> <thead> <tr> <th colspan="2">Technical Data<sup>∅</sup></th> <th>White Base</th> </tr> </thead> <tbody> <tr> <td>Vehicle Type</td> <td></td> <td>100% Acrylic Latex</td> </tr> <tr> <td>Pigment Type</td> <td></td> <td>Titanium Dioxide</td> </tr> <tr> <td>Volume Solids</td> <td></td> <td>36%</td> </tr> <tr> <td>Coverage per Gallon at Recommended Film Thickness</td> <td></td> <td>300 – 400 Sq. Ft.</td> </tr> <tr> <td>Recommended Film Thickness</td> <td>– Wet</td> <td>4.8 – 3.5 mils</td> </tr> <tr> <td></td> <td>– Dry</td> <td>1.7 – 1.3 mils</td> </tr> <tr> <td colspan="3">Depending on surface texture and porosity. Be sure to estimate the right amount of paint for the job. This will ensure color uniformity and minimize the disposal of excess paint.</td> </tr> <tr> <td>Dry Time @ 77 °F (25 °C) @ 50% RH</td> <td>– To Touch</td> <td>1/2 Hour</td> </tr> <tr> <td></td> <td>– To Topcoat</td> <td>4 Hours</td> </tr> <tr> <td colspan="3">High humidity and cool temperatures will result in longer dry, recoat and service times. Allow 48 hours dry time before subjecting decks to normal foot traffic.</td> </tr> <tr> <td>Dries By</td> <td></td> <td>Evaporation, Coalescence</td> </tr> <tr> <td>Viscosity</td> <td></td> <td>72 ± 3 KU</td> </tr> <tr> <td>Flash Point</td> <td></td> <td>None</td> </tr> <tr> <td>Gloss / Sheen</td> <td></td> <td>Flat</td> </tr> <tr> <td>Surface Temperature at Application</td> <td>– Min.</td> <td>40 °F</td> </tr> <tr> <td></td> <td>– Max</td> <td>90 °F</td> </tr> <tr> <td>Thin With</td> <td></td> <td>See Chart</td> </tr> <tr> <td>Clean Up Thinner</td> <td></td> <td>Clean Water</td> </tr> <tr> <td>Weight Per Gallon</td> <td></td> <td>10.3 lbs</td> </tr> <tr> <td>Storage Temperature</td> <td>– Min.</td> <td>40 °F</td> </tr> <tr> <td></td> <td>– Max</td> <td>90 °F</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Volatile Organic Compounds (VOC)</b></td> </tr> <tr> <td colspan="2"></td> <td>93 Grams/Liter .78 lbs./Gallon</td> </tr> </tbody> </table>	Technical Data <sup>∅</sup>		White Base	Vehicle Type		100% Acrylic Latex	Pigment Type		Titanium Dioxide	Volume Solids		36%	Coverage per Gallon at Recommended Film Thickness		300 – 400 Sq. Ft.	Recommended Film Thickness	– Wet	4.8 – 3.5 mils		– Dry	1.7 – 1.3 mils	Depending on surface texture and porosity. Be sure to estimate the right amount of paint for the job. This will ensure color uniformity and minimize the disposal of excess paint.			Dry Time @ 77 °F (25 °C) @ 50% RH	– To Touch	1/2 Hour		– To Topcoat	4 Hours	High humidity and cool temperatures will result in longer dry, recoat and service times. Allow 48 hours dry time before subjecting decks to normal foot traffic.			Dries By		Evaporation, Coalescence	Viscosity		72 ± 3 KU	Flash Point		None	Gloss / Sheen		Flat	Surface Temperature at Application	– Min.	40 °F		– Max	90 °F	Thin With		See Chart	Clean Up Thinner		Clean Water	Weight Per Gallon		10.3 lbs	Storage Temperature	– Min.	40 °F		– Max	90 °F	<b>Volatile Organic Compounds (VOC)</b>					93 Grams/Liter .78 lbs./Gallon
Technical Data <sup>∅</sup>		White Base																																																																							
Vehicle Type		100% Acrylic Latex																																																																							
Pigment Type		Titanium Dioxide																																																																							
Volume Solids		36%																																																																							
Coverage per Gallon at Recommended Film Thickness		300 – 400 Sq. Ft.																																																																							
Recommended Film Thickness	– Wet	4.8 – 3.5 mils																																																																							
	– Dry	1.7 – 1.3 mils																																																																							
Depending on surface texture and porosity. Be sure to estimate the right amount of paint for the job. This will ensure color uniformity and minimize the disposal of excess paint.																																																																									
Dry Time @ 77 °F (25 °C) @ 50% RH	– To Touch	1/2 Hour																																																																							
	– To Topcoat	4 Hours																																																																							
High humidity and cool temperatures will result in longer dry, recoat and service times. Allow 48 hours dry time before subjecting decks to normal foot traffic.																																																																									
Dries By		Evaporation, Coalescence																																																																							
Viscosity		72 ± 3 KU																																																																							
Flash Point		None																																																																							
Gloss / Sheen		Flat																																																																							
Surface Temperature at Application	– Min.	40 °F																																																																							
	– Max	90 °F																																																																							
Thin With		See Chart																																																																							
Clean Up Thinner		Clean Water																																																																							
Weight Per Gallon		10.3 lbs																																																																							
Storage Temperature	– Min.	40 °F																																																																							
	– Max	90 °F																																																																							
<b>Volatile Organic Compounds (VOC)</b>																																																																									
		93 Grams/Liter .78 lbs./Gallon																																																																							

<sup>∅</sup>Reported values are for White Base. Contact Benjamin Moore for values of other bases or colors.

## Surface Preparation

Optimal performance is achieved when the product is applied to a clean, dry and absorbent wood substrate. This product must be able to penetrate.

**New Wood:** Smooth planed wood siding, trim, or deck boards must be sanded thoroughly or treated with Benjamin Moore® Brighten, Brightener & Neutralizer (317) to break the “mill glaze” and allow proper penetration and adhesion. After prep is complete, test for penetration by applying a few drops of water to the dry substrate. If the water does not quickly penetrate, repeat prep or consult your Benjamin Moore® retailer.

**Weathered Wood:** Prior to staining, weathered wood must be treated with Benjamin Moore® Restore, for Gray & Weathered Wood (N316), following label directions, until a sound surface is obtained (loose or damaged wood fibers removed).

**Previously Stained Surfaces:** This product can also be applied to surfaces previously stained with a transparent stain that is weathered but is not flaking or peeling. Remove contaminants or chalky residue from weathered stained surfaces by washing with Benjamin Moore® Clean, Multi-Purpose Cleaner (N318) and allow to dry thoroughly.

If the existing stain is flaking or peeling it should be removed prior to staining. Existing paint, stain or sealer can be removed by sanding with an On Floor machine or using Benjamin Moore® Remove, Finish Remover (315).

**Un-weathered areas** such as eaves, ceilings, overhangs or protected wall areas must be washed with Benjamin Moore® Clean, (N318) and rinsed with a strong stream from a garden hose to remove surface salts that can interfere with proper adhesion.

**Mildew:** Stains from mildew must be removed by cleaning with Benjamin Moore® Clean (N318) prior to coating the surface.

**Caution:** Refer to the 315, N316, 317 and N318 technical data and material safety data sheets for instructions on their proper use and handling.

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-approved respirator to control lead exposure. Carefully clean up with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

## Application

Prior to finishing, ensure having enough stain to complete an entire section.

Stir thoroughly before and occasionally during use. Stain can be applied by brush, roller, pad applicator or by spray. If the product is applied using a roller or sprayer, it is recommended to back-brush the stain into the wood with the direction of the natural grain. Apply as received in the container.

Apply 1 or 2 coats Arborcoat® Waterborne Exterior Stain. A second coat provides optimal performance and uniformity. Wait for the first coat to dry for a minimum of 4 hours before applying the second coat. Please note that multiple coats will affect the opacity of the final finish and obscure more of the natural color of the wood.

Multiple coats may also result with the finish having a slight sheen. This sheen will slowly decrease with normal weathering.

### In can color may differ from the final dried finish.

Start by coating a sample of the exact wood you intend to finish. The finished color and sheen of the stain system can vary depending on the type of wood—its natural color, texture, grain porosity, and section of log from which it was cut.

Apply evenly, allowing the stain to penetrate into the wood. Brush from dry into wet areas, stopping at natural breaks, i.e. stairs or edges.

To minimize lapping, always maintain a wet edge. On horizontal siding apply the stain on a section of 2 or 3 boards completely across the house. Lower the ladder and continue in the same manner until the side is completed. Vertical siding is coated using the same principle from top to bottom. Never stop staining in mid-wall; continue until a natural break is reached, such as a window.

Do not apply excess amounts as this will prevent optimum cure and may result in a solid color appearance. Do not apply in direct sunlight as this will prevent the product from penetrating properly, causing lap marks.

Apply when air and surface temperatures are between 40 °F (4.4 °C) and 90 °F (32 °C).

## Thinning/Clean up

Conditioning with Benjamin Moore® 518 Extender may be necessary under certain conditions to adjust open time or spray characteristics. The chart below is for general guidance		
	<b>Mild conditions</b>	<b>Severe conditions</b>
	Humid (RH>50%) with no direct sunlight & with little to no wind	Dry (RH<50%), in direct sunlight, or windy conditions
<b>Brush:</b> Nylon/Polyester	No Thinning Necessary	Add 518 Extender or water: Max of 8 fl. oz. to a gallon of stain  Never add other stains, paints or solvents.
<b>Roller:</b> Premium Quality Nylon/Polyester		
<b>Spray: Airless*</b> Pressure: 1200 – 1800 psi Tip: 0.011 - 0.015"		

Use soap and water.

USE COMPLETELY OR DISPOSE OF PROPERLY. Dry empty containers may be recycled in a can recycling program. **Local disposal requirements vary; consult your sanitation department or state-designated environmental agency on disposal options.**

## Environmental Health & Safety Information

### WARNING!

**Possible birth defect hazard.** Contains, Carbamic acid, 1H-benzimidazol-2-yl-, methyl ester, which may cause birth defects based on animal data.

**Use only with adequate ventilation.** Do not breathe spray mist or sanding dust. Ensure fresh air entry during application and drying. Avoid contact with eyes and prolonged or repeated contact with skin. Avoid exposure to dust and spray mist by wearing a NIOSH approved respirator during application, sanding and clean up. Follow respirator manufacturer's directions for respirator use. Close container after each use. Wash thoroughly after handling.



**WARNING** Cancer and Reproductive Harm—  
[www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

**FIRST AID:** In case of eye contact, flush immediately with plenty of water for at least 15 minutes; for skin, wash thoroughly with soap and water. If symptoms persist, seek medical attention. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

**IN CASE OF SPILL** — Absorb with inert material and dispose of as specified under “Clean Up”.

**KEEP OUT OF REACH OF CHILDREN  
PROTECT FROM FREEZING**

**Refer to Safety Data Sheet for additional health and safety information.**