

BERNYL™ TRANSPARENT SURFACER
DF5300000
DESCRIPTION:

Bernyl™ Transparent Surfacers is a fast drying, acid cured, post-catalyzed surfacer designed to prime or seal interior MDF. Using this as the first coat on MDF will give very good adhesion to the substrate and excellent filling and sanding characteristics. This surfacer is commonly used as a surfacer over MDF and solid wood, followed by either Bernyl™ Surfacers or Bernyl™ Unisurfacer, then topcoated with Matador™. This finishing system can also be used on interior solid wood. This surfacer has very high volume solids and low HAPS.

PRODUCT DATA:

Color:	Wet: Translucent Dry: Clear	VOC (as packaged, maximum, less water and exempt solvents):	2.68 lb/gal, 322 g/l
Solids % by Vol.:	60 % (Theoretical)	VOC (emitted):	2.68 lb/gal, 322 g/l
Solids % by Wt.:	71 % (Theoretical)	Lbs. VHAPs / Lbs. Solids:	0.06
Weight / Gal.:	9.22 lb	Flash Point (PM/CC):	13° C / 55° F
Viscosity 23°C / 73°F:	#4 Ford: 90-110 Sec.	Photo Chemically Reactive:	Yes
Viscosity 23°C / 73°F:	DIN 4: 80-100 Sec.	Shelf Life:	12 months (at 15-25° C / 59°-77° F)
Viscosity 23°C / 73°F:	Zahn #2 sig.: N/A	Theo. Coverage @1mil dry	960 Sq. Ft./Gal. 100% Efficiency

MIXING / APPLICATION:

Working Temp: >18° C, 65° F substrate, coating and air
Catalyzation: 12% by volume using either Catalyst 2750 (standard), Catalyst 494 (slow), or Catalyst 309 (HAPS free, fast).
Pot Life: 1 Day (23° C / 73° F)
Mixing: Add catalyst under agitation. Use proper graduated cup for measuring. Be attentive to the correct ratio. Add thinner after catalyst. Add thinner to desired viscosity, typically about 10%.
Sealer: Bernyl™ Transparent Surfacers may be used under Bernyl™ Unisurfacer as a primer/surfacer.
Reducer: Thinner 219 (regular), Thinner OC 140 (fast), Thinner 309 (fast, HAPS free), Thinner 419 (slow, HAPS free)
Application: 90-110 (g/m²) Approx. 3.5 wet mils; Min. 1 mil wet-Max 4.5 mil wet @ 60%RH
Surface Prep: Substrate should be clean and free of grease and oil. Moisture content of the wood should be between 6%-8%. Sand substrate with 180 Grit. Sand the first coat (with 220 to 320 paper) in order to eliminate grain raising and improve adhesion of the subsequent coat. Topcoat within 8 hours of sanding.
Use Directions: For interior use only. Mix thoroughly before application. Stack only when the surface temperature is below 35° C / 95° F. Dry time can be directly impacted by many factors, including film thickness. Users are urged to test the system under shop conditions.
App. Equip.: Conventional & HVLP Siphon Feed and Pressure Pot Systems and Airless Air Assist Equipment.
Tinting: Can be tinted with Chroma Chem 866 colorants to a maximum of 10% by weight. Chroma Chem 844 colorants can be used at the same amount with the exception of Yellow Oxide and Lamp Black. 844 Yellow Oxide and Lamp Black can result in unstable color combinations and are not recommended. Prior to application, test a sample piece to ensure proper color match.

DRYING TIMES TO SAND / STACK:

Method	Drying Temp.	Drying Time (@ 60 % RH and thickness @ 1 mil dry)
Air Drying	20° C / 68° F	2 hr. dry to sand / 2 - 4 hr. dry to stack

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APPLICATION RECOMMENDATIONS:
APPLICATION EQUIPMENT SETTINGS

Method of Application	Wet Film		Dry Film	
	Mils	g/m ²	Mils	Microns
Conventional – Siphon Fed	3 – 4 mils	90-110 g/m ²	1.4-2.4 mils	35-61 microns
Conventional – Pressure Pot	3 – 4 mils	90-110 g/m ²	1.4-2.4 mils	35-61 microns
Airless Air Assist	3 – 4 mils	90-110 g/m ²	1.4-2.4 mils	35-61 microns
HVLP - Siphon Fed	3 – 4 mils	90-110 g/m ²	1.4-2.4 mils	35-61 microns
HVLP - Pressure Pot	3 – 4 mils	90-110 g/m ²	1.4-2.4 mils	35-61 microns

All measurements and application equipment settings are based on application at a temperature of 68°F. Viscosity will vary depending on the temperature of the liquid. The application equipment setting recommendations are guidelines only. The settings are starting point recommendations and adjustments to the equipment settings and equipment may be needed to obtain the desired results. Please refer to your specific equipment manufacturer's recommendations for equipment set-up.

REDUCTION – TIP SIZE – PSI SETTINGS
Conventional Equipment Siphon Feed:

Reduce to 18-21 seconds #4 ford viscosity cup, nozzle size 0.070 inches (1.8mm) – 0.0 inches (2.0 mm), atomizing air 40 psi (2.8bar)–50 psi (3.5 bar).

Conventional Equipment Pressure Pot:

Reduce to 18-21 seconds #4 ford viscosity cup, nozzle size 0.472 inches (1.2mm) – 0.055 inches (1.4 mm), atomizing air 40 psi (2.8 bar)–50 psi (3.5 bar), Pot pressure 7 psi (0.48 bar) to 10 psi (0.68 bar)

Airless Air Assist Equipment:

Reduce to 18-25 seconds #4 ford viscosity cup, tip size .011 inches (0.28mm) - .013 inches (0.33mm), fluid pressure 290 psi (20 bar) – 580psi (40 bar), atomizing air 11psi (0.8 bar) to 17psi (1.2 bar).

HVLP Equipment Siphon Feed:

Reduce to 17-21 seconds #4 ford viscosity cup, .061inch (1.5mm) - .072inch (1.8MM) nozzle, atomizing air 35psi (2.4bar) -45 psi (3.1bar).

HVLP Equipment Pressure Pot:

Reduce to 17-21 seconds #4 ford viscosity cup, 0.472 inches (1.2mm) – 0.055 inches (1.4 mm) nozzle, atomizing air 20psi (1.37 bar) -25 psi (1.72 bar). Pot pressure 7 psi (0.48 bar) to 10 psi (0.68 bar)

PRODUCT NOTES

- Remove any dirt, grease, glue or other construction contaminants and sand substrate prior to priming with Beryl™ Transparent Surfacers.
- For best adhesion, sanding is critical. When using Beryl™ Transparent Surfacers, sanding on solid wood should be done using a maximum of 180 grit sandpaper. All sanding belts and sandpaper used should not be worn, as worn sanding materials may polish the wood.
- When using Beryl™ Transparent Surfacers on MDF, sand any routed areas with a minimum of 400 grit sandpaper. UV filled MDF board must be sanded before application of Beryl™ Transparent Surfacers to ensure good inter-coat adhesion.
- To help reduce trapped air, blushing or orange peel, use Retarder 0987 at a maximum of 2% by volume.
- Maximum recommended dry film thickness for total coating system is 7 dry mils.

CONTACTS:

PH: AcromaPro Canada / 519-758-1508
 PH: AcromaPro USA / 812-288-0712

www.AcromaPro.com



TESTING: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

FOR INDUSTRIAL SHOP APPLICATION: Thoroughly review Material Safety Data Sheet (MSDS) for safety information and cautions prior to using this product. For Regulatory compliance data (i.e. VOC, HAPS, etc.), obtain an Environmental Data Sheet (EDS) prior to using the product. A MSDS and/or EDS is available from your local distributor or representative. Please direct any questions or comments to 1-800-524-5979.

NOTE: Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, AcromaPro cannot make any warranties as to the end result.