PRODUCT DATA SHEET
AWL®SPAR H.S. High Solids Marine Varnish M3146

Features & Uses

New technological advances allow AWLSPAR H.S. more build per coat with maximum gloss and durability. This improvement creates a product with higher solids and less solvent (VOC). This single component product has excellent application characteristics by brush or spray and can be over coated with AWL®-BRITE Clear Urethane in as little as seven days to achieve the Ultimate Bright Work System. The end result of this product development collaboration is an improved, longer lasting, full gloss finish for marine bright work.

Specification Data

Type: High Solids Phenolic Varnish
Color: Amber
Packaging: Available in quarts
Theoretical Coverage - Sq. Feet/Gallon; 1,023 Sq. Feet (95m^2) at 1 mil dry (25 microns) with no reduction;
102-114 Sq. Feet (9-11m^2) at recommended total dry film thickness of 9-10 mils.
Recommended Wet Film Thickness: 2-3 mils (50-75 microns) per coat.
Recommended Dry Film Thickness: 1-2 mils (25-50 microns) per coat. 6-8 coats recommended.
Coverage calculations are based on theoretical transfer efficiency of 100%. Actual coverage rate obtained will vary according to equipment choice, application techniques, part size, and application environment.
Anticipated Cure Time at 77°F(25°C)/50% R.H: 24 hours to handle.
Recommended Coats: 6-8
Recoatability: With itself: 12 - 16 hours, 36 hours maximum without sanding or scuffing. With AWL-BRITE: 7 days minimum at 77°F(25°C)/50% RH. Sand with 320 to 400 grit paper before applying AWL-BRITE Clear Urethane.

VOC: 285 g/lt or 2.38 lbs/gallon

Product Components, Reducers, Additives, and Auxiliary Components

AWLSPAR H.S. - Amber/Clear M3146
AWLSPAR Spray Reducer T0180
AWLSPAR Brush Reducer T0016
Equipment Cleaning ..... T0180, T0016 or Odorless Mineral Spirits

Application Equipment

Spray, Brush and Roller application.
SPRAY EQUIPMENT

Pressure Pot System Guns
Binks or equivalent:
Spray Gun: #95
Fluid Nozzle: #63BSS (.046" Orifice Size)
Fluid Needle: #663A
Air Nozzle: #63PW
Pressure pot gauge should read 8 to 12 lbs. with 50 to 60 lbs. atomization.

Siphon or Cup Gun System
Binks or equivalent:
Spray Gun: #95
Fluid Nozzle: #66SS (.070" Orifice Size)
Fluid Needle: #665
Air Nozzle: #63SK
Atomizing air pressure should be approximately 50 to 60 lbs.

High Volume Low Pressure Guns
Binks MACH 1 or equivalent pressure pot:
For use with all U.S. Paint Topcoats and low viscosity primers.
Fluid Nozzle: #91 (.040" Orifice Size)
#92 (.046" Orifice Size)
Fluid Needle: #54-4382
Air Nozzle: #93P

BRUSHES AND ROLLERS

1 East Water Street • Waukegan, Illinois 60085 • USA • Tel: 847.599.6212 • Fax: 847.599.6209
Bannerlaan 54 • B-2280 Grobbendonk • Belgium • Intl. Tel: 32.14.257770 • Intl. Fax: 32.14.230880
76 Waterway Drive • Coomera • QLD 4209 • Australia • Tel: 61.7.5573.9600 or 1800.007.866 • Fax: 61.7.5573.9677
449 Tagore Industrial Avenue • 01-03 Hong Joo Industrial Building • Singapore 787820 • Tel: 65.6453.1981 • Fax: 65.6453.1778

Brushes must be recommended for use with solvent containing epoxy or urethane coatings. Natural bristle brushes work best. Do not use products recommended for water based coatings. Roller covers have similar requirements. They can be either foam or conventional mohair type, but must be solvent resistant. Corona Brushes (813-885-2525) and Redtree Industries (973-481-0200) are good sources for brushes and roller covers. The Heritage, Europa, or Urethaner from Corona; or the Badger, Onyx or China Ox from Redtree could be used. The Heritage and Badger are the top brushes in each line.

Surface Preparation

The wood should be clean, dry, smooth, and well seasoned.
New Wood / Bare Wood: Use of a marine teak cleaner or wood bleach is advised on new wood to remove excess oils, promote color uniformity, and adhesion. Follow manufacturer's instructions for use and thoroughly remove all cleaner and neutralizer residue before proceeding. Rough sawn lumber must receive heavy sanding to level the grain. Work through the grits to effectively level the grain 60/80 to 100/150 to 220 and so on. When the grain is level, smooth sand the surface with 220 to 280 grit paper.

Existing Finishes: Old finishes in good condition should be washed with AWL-PREP 400 Wipe Down Solvent (T0170), then sanded with 220-320 grit paper to remove the gloss. Old finishes in poor condition should be removed. Test on a small area to make sure AWLSPAR H.S. does not attack the old finish. If old finish is attacked, it must be completely removed.

Note: Due to the wide variety of substrates, surface preparations, application methods and environments, customers should test the complete system for adhesion and compatibility under their conditions prior to full scale application.

Mixing & Reduction

New Wood/Bare Wood
First Coat: Reduce the first coat 100% by volume with either T0180 for spray application or T0016 for brush application. This reduction will allow the M3146 to penetrate into the wood and seal the surface. Example 8 oz. M3146 and 8 oz. T0180 or T0016.
Building Coats/Restoration Work
Spray: Reduce up to 25% by volume with T0180. Example: 8 oz. M3146 and 2 oz. T0180
Brush/Roll: Additional reduction is not normally required. If a thinner material is desired reduce as needed with T0016.
Induction Time after Mixing: N/A. Anticipated Pot Life at 77°F(25°C)/50% RH: N/A

Application Instructions

New Wood/Bare Wood
First Coat. Apply one, light, smooth coat of AWLSPAR H.S. M3146 (reduced as per above recommendation). Allow to dry 8-12 hours. Lightly sand the surface with 320-400 grit paper to remove wicks and nubs. Remove sanding dust and residue. Tack off with AWLGRIP 73009 Tack Rags. For a fast drying clear wood grain filler, seal bare wood with Awlbrite Quik-Fil Clear J3901/J3902 – 4 coats minimum.

Building Coats/Restoration Work
Apply a light, smooth coat of AWLSPAR H.S. M3146. Apply one coat per day. If using the M3146 as a base for AWL-BRITE Clear Urethane, apply two to three coats and allow the system to cure for seven days (minimum) before proceeding. If building the M3146 as a stand alone coating, repeat this process until the grain is filled and covered, 6 to 8 coats may be needed. Keep sanding to a minimum. A light rub with a Scotchbrite® pad is often enough to break the glaze of the previous coat, providing sufficient adhesion for subsequent coats.

When the grain is completely filled and covered, lightly sand the surface smooth with 400-500 grit paper. Apply one coat of AWLSPAR H.S. M3146 to restore gloss to the sanded surface. A good system would include a minimum of 6 to 8 coats. Exact number of coats needed will vary by applied film thickness and the amount of sanding. Best results are achieved when temperatures are between 60°F (16°C) and 90°F (32°C).

Temperature Range: Optimal Surface/Ambient Temperature range is 18°C (60°F) to 35°C (95°F). Do not apply paint materials to surfaces less than 3°C or 5° F above dew point. Do not apply paint materials to surfaces warmer than 41°C (105°F). Ambient temperature should be minimum 10°C (50°F) and maximum 41°C (105°F).

The information in this Product Data Sheet is not intended to be exhaustive. Any person using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk and, to the extent permitted by law, we can accept no responsibility for the performance of the product or for any loss or damage arising out of such use. The information contained in this Product Data Sheet is liable to modification from time to time in the light of experience and our policy of continuous product development. Awlgrip and Awl® are registered trademarks of Akzo Nobel. © Akzo Nobel, 2005

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