Z-Spar Ultra Clear Varnish

Clear Urethane Varnish

TECHNICAL BULLETIN TB335 5/13

- Fast drying
- Easy to apply
- Pale color is ideal for all bright work
- Contains UV absorbers to maintain outstanding gloss
- Tough urethane polymer provides remarkable scratch and chip resistance

Pettit Captains Ultra Clear Varnish 2067 is a premium urethane varnish formulated for maximum durability. This clear varnish is highly regarded for its versatile application, fast dry, and tough yet flexible durability. The UV inhibitors in this product help it maintain outstanding gloss long after ordinary varnishes have faded. Ultra Clear Varnish provides remarkable scratch and chip resistance. Among its attributes are those making it a pleasure to apply—easy brushability, excellent leveling, and fast build-up.

PHYSICAL DATA

PART NUMBER: 2067
RESIN: Urethane
Oil: Linoleic Fatty Acid
SOLIDS (theoretical)
By weight: 47 ± 1%
By volume: 40 ± 1%
COVERAGE: 600 sq. ft/gal.
VOC: 487 g/l (4.06 lbs/gal) as supplied
FLASH POINT: 109° F.

APPLICATION DATA

METHOD: Brush, Roller, or Spray
NUMBER OF COATS:
Bare Wood: 5 minimum
Existing Varnish: 2 minimum
DRY FILM THICKNESS PER COAT: 1.0 to 1.2 mils (2.5—3.0 wet mils)
APPLICATION TEMP: 50° F. Min. / 90°F. Max.
DRY TIME (HOURS):

	Set-to-touch	Tack Free	Dry Hard
90°	3/4-1/12	3-5	6-8
70°	1 1/2-2 1/2	6-10	12-16
50°	3-5	12-20	24-32

THINNER:
120 Brushing Thinner
121 Spraying Thinner

ASSOCIATED PRODUCTS

2018 EZ WoodSealer
Pettit Paste Wood Filler Stains
Z-Spar Filler Stains
120 Brushing Thinner
121 Spraying Thinner

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APPLICATION INFORMATION

Do not shake varnish. Stir gently before application, being careful not to introduce air bubbles into the varnish. Z-Spar Ultra Clear Varnish may be applied by brush, conventional or airless spray. Thinning is not normally required although on warm days use Pettit 120 Brushing Thinner at 5-10% by volume to ease brushing and maintain good flow and leveling. When spraying, use Pettit 121 Spraying Thinner up to 20% by volume. Spray one even, wet coat to minimize orange peel. Do not apply in heavy films or build coats too quickly as solvent entrapment, blistering or wrinkling may occur. Do not apply Ultra Clear Varnish on extremely humid days or when rain is threatening. Do not apply in the late afternoon when working outdoors as the wet film may be adversely affected by dew. DO NOT apply this varnish to a wood hull which has been dried more than one week under conditions such as artificial heat. Do not use Ultra Clear Varnish below the waterline on boats that remain in the water. The moisture content of the wood should be a minimum of 15% when varnished. This will eliminate expansion cracking, micro-checking and gloss loss when the varnish is in service.

SURFACE PREPARATION

Wood must be clean, dry and properly prepared prior to varnishing. When sanding wood, always sand with the grain. Use a vacuum, air hose, or tack rag to remove all traces of sanding residue. Follow all surface preparation steps carefully, avoiding shortcuts. Inadequate surface preparation will virtually assure inadequate varnish performance.

SYSTEMS

Bare Wood

1. Sand surface completely smooth with 180-320 grit production paper. Wipe surface to remove sanding residue with a tack rag or rag dampened with Pettit 120 Brushing Thinner.
2. For new work on open grained wood such as mahogany, oak, ash, etc. the use of Pettit or Z-Spar Paste Wood Filler Stain is required to achieve a smooth finish. Let dry overnight. For new work on close grained woods such as pine, maple, spruce, etc. the use of Pettit or Z-Spar Paste Wood Filler Stain is not normally required.
3. Apply a generous covering coat of Pettit 2018 EZ WoodSealer Let it dry overnight and sand thoroughly with 220 grit sandpaper. On especially rough or porous wood, a second coat of 2018 EZ WoodSealer may be applied. If applied, sand the second coat as well and wipe the surface clean with a tack rag or a rag dampened with Pettit 120 Brushing Thinner.
4. Apply at least five coats of Z-Spar Ultra Clear Varnish. Let each coat dry overnight, sand with 220 grit sandpaper, and clean off sanding residue with a tack rag before applying the next coat. Sand the next to last coat with 400 grit production paper and clean off sanding residue with a tack rag before applying the final coat. ***NOTE:** If temperature is above 70°F recoating may be done between 12 and 24 hours without sanding. If the varnish has dried longer than 24 hours, sand and recoat.

Varnished Wood in Good Condition

1. Wipe old varnish with Pettit 120 Brushing Thinner to be sure all dirt, wax, polish and/or grease has been removed.
2. Thoroughly sand the existing varnish with 180-220 grit production paper and wipe clean with a tack rag.
3. Apply at least two coats of Z-Spar Ultra Clear Varnish Let the first coat dry overnight, sand with 400 grit sandpaper and clean off sanding residue with a tack rag before applying the final coat.

Varnished Wood in Poor Condition

1. Remove all the old varnish with a paint and varnish remover or by sanding.
2. Bleach the wood if necessary to remove water stains.
3. Proceed with the system for bare wood shown above.

Bare Teak- (or other woods with high oil content)

1. Sand the wood smooth with 120 grit production paper to open up the grain. Wipe the surface thoroughly with Pettit 120 Brushing Thinner in an effort to aggressively remove as much oil as possible.
2. Apply a generous coat of Pettit 2018 EZ WoodSealer. After an overnight dry, lightly sand the surface with 220 grit sandpaper and wipe it clean with a rag dampened with Pettit 120 Brushing Thinner.
3. Apply at least five coats of Z-Spar Ultra-Clear Varnish. Let each coat dry overnight, sand with 220 grit sandpaper, and clean off sanding residue with a tack rag before applying the next coat. Sand the next to last coat with 400 grit production paper prior to applying the final coat.

It should be noted that woods with a high oil content may eventually experience adhesion problems as there is no way to totally eliminate the oil and prevent it