

QUANTUMUV 2-PART VARNISH



INTRODUCTION

QUANTUM^{UV} is a self-sealing clear urethane varnish finish system specially formulated for marine brightwork. This high solids 2K hybrid urethane provides superior protection and beauty to all timber substrates.

USES

By chemically bonding to the wood on a molecular level this low VOC, easy to apply coating provides a durable, flexible finish in even the harshest marine environments. This high solids, high build finish system is available in satin and gloss and can be applied via spray or brush application. For interior or exterior use above the water line only.

FEATURES

- Easy to Apply via Spray or Brush Application
- Excellent Pot Life
- High Solids, High Build, Fewer Coats
- Superior Weatherability
- Excellent Reparability
- Aerospace Grade Flexibility and Chemical Resistance
- Scratch Resistant
- Mold/Mildew Resistant



PHYSICAL PROPERTIES

| Appearance: | GLOSS OR SATIN CLEAR |
|------------------------------|-------------------------|
| GLOSS: | >92 @ 60º |
| SATIN GLOSS: | 40-50 @ 60º |
| VISCOSITY (ADMIXED): | 20-24" Zahn #2 |
| VOLUME SOLIDS (ADMIXED): | 60 +/-2% |
| VOC (ADMIXED): | <2.8 #/GAL (335 g/L) |
| Pot Life: | 4 HOURS @ 77 ºF |
| Dry to Tape: | 8 HRS @ 77 ºF, 50% RH |
| DRY TO RECOAT: | 45 MINS @ 77 ºF, 50% RH |
| COVERAGE @ 1 MIL (NO LOSS): | 960 ft²/gal |
| COVERAGE @ 3 MILS (NO LOSS): | 320 ft²/gal |
| SHELF LIFE: | 2 YEARS FROM DOM |





SURFACE PREPERATION

The surface preparation advice provided, and equipment suggestions, can be used as a guide. Testing on a non-critical area should be carried out prior to full-scale preparation. Any cracks in the timber should be epoxy filled or splined with timber prior to sanding. Radius all edges to ensure that no sharp corners remain. Oxalic acid based teak cleaners can impair cure of QUANTUM^{UV} and should be avoided. If timber is badly weathered, scrub with the grain using a stiff bristled wire brush and running water to remove all grey timber from the surface before sanding. Remove all previous coating systems and contaminants. The surface of the timber should be mechanically removed until coloration is even and the original timber tone has been exposed. All substrates must be sanded using no finer than 220 grit sandpaper. If bare timber has been saturated with salt water at any stage, scrub well with fresh water to remove salt deposits from the timber before commencing sanding. If the timber gets wet after the final sand water spots may appear. Re-sand these areas with 220 grit paper before sealing.



MIXING

COMPONENTS

| 99-ST-GLOSS | Quantum ^{UV} Clear Gloss Base | |
|-------------|--|--|
| 99-ST-SATIN | Quantum ^{UV} Clear Satin Base | |
| 99-ABR-2001 | Quantum Brushing Activator | |
| 99-A-100 | Quantum Urethane Spray Activator | |
| SR-95 | Quantum Brushing Reducer | |
| SR-99 | Quantum Spray Reducer | |
| 99-X-105 | Quantum Urethane Accelerator | |



MIX RATIO

| BRUSH/ROLL | PARTS | EXAMPLE |
|-------------|-------|---------|
| 99-ST-BASE | 2 | 8oz |
| 99-ABR-2001 | 1 | 4oz |
| SR-95 | 1 | 4oz |
| | | |
| SPRAY | PARTS | EXAMPLE |
| 99-ST-BASE | 1 | 8oz |
| 99-A-100 | 1 | 8oz |
| SR-99 | 0-10% | 0-1.6oz |





MIXING

BRUSH/ROLL

To 2 parts 99-ST Base slowly add 1 part 99-ABR-2001 Brushing Activator by volume. Agitate to ensure complete mixing. Next add 1 part SR-95 by volume and mix thoroughly.

SPRAY

To 1 part 99-ST-Base, slowly add 1 part 99-A-100 Spray activator by volume. Agitate to ensure complete mixing. Next add up to 10% SR-99, SR-001, or SR-005 by Volume and mix thoroughly.

APPLICATION

BRUSH/ROLL

QUANTUM^{UV} can be applied at a greater rate than a standard varnish. This system is self-leveling - do not overwork the surface and aim to keep wet edge times under 90 seconds depending on the temperature. Using a foam brush, hold at a 45 degree angle from the substrate and allow the varnish to "pull" off the brush in one direction. You do not need to use back and forth application. Continue in one direction until desired substrate is coated. Allow about 1hr @ 72F between coats. 5-8 coats are recommend for ultimate protection.

SPRAY

QUANTUM^{UV} can be applied by air atomized spray gun (fluid tip 1.1-1.4). Apply medium wet coat and allow 45mins to 1hr between coats. Continue until desired build and smoothness is obtained. Recommend 5-8 coats for ultimate protection.

Note: For best results, apply first two coats on Day 1, wait at least 12 hours and sand with 320 grit before next 3 coats. Sand with 320 grit sandpaper between applications. Repeat above procedure until desired build and smoothness is obtained

NOTE: If 8hrs is exceeded between coats, scuff or sand surface prior to any additional coats.

NOTE: Application of these product systems requires recommended temperature/humidity conditions and film thickness ranges. The material, hangar, and substrate temperature should be no lower than 45°F before, during, and after application. Do not apply paint materials to surfaces less than 5°F above dew point, or to surfaces warmer than 110°F. Substrate temperature should be minimum 45°F to maximum 105°F.

PRECAUTIONS

Use with adequate ventilation and proper respiratory protection. See MSDS for complete details of composition and precautions.

