



Industrial Wood Coatings

CC-F81

SHER-WOOD® F3 KEMVAR® Plus Conversion Varnish

Gloss WhiteV85W351
Low Gloss WhiteV85W353
Gloss Blending ClearV85V354

Low Gloss Blending Clear.....V85F355
Custom Blend.....V85FX Series
Catalyst.....V66V26

DESCRIPTION

SHER-WOOD® F3 KEMVAR® Plus Conversion Varnish is a formaldehyde free pigmented conversion varnish coating designed for coating interior woodworking. This acid cure coating is suitable for hardwood, softwood, particle board, MDF and veneer surfaces. SHER-WOOD F3 KEMVAR Plus Conversion Varnish is ideal for kitchen cabinets, vanities, office furniture, household furniture, and a wide range of interior wood products.

Advantages:

- Formaldehyde free coating at application and on cured parts
- Five day pot life - Less material handling and cleanup
- Full range of colors achievable by adding OptiColor® XP or GIS colorants up to 6 ounces per gallon.
- No reduction required
- Meets KCMA test requirements when used over E63W350
- High solids and build
- Good non-yellowing properties
- Excellent mar resistance
- Good resistance to moisture and household chemicals
- UL GREENGUARD Gold Certified for low chemical emissions



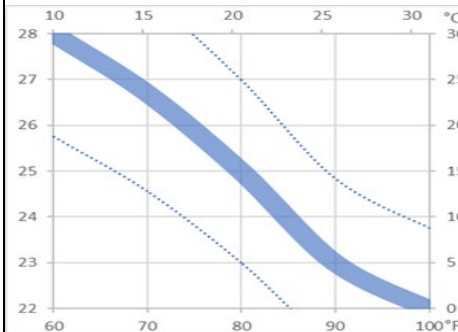
CHARACTERISTICS

Gloss: Gloss 82-88 units
Low Gloss 13-18 units

Volume Solids: 33.0 ± 2% may vary by color

Package Viscosity:
24-29 seconds (#2 sig Zahn Cup)

Catalyzed / Reduced Viscosity Target:
19-23 (#2 Sig Zahn Cup)



The above chart is for information only and should not be used as product specifications

Recommended film thickness:
Mils Wet 3.0 - 4.0
Mils Dry 1.0 - 1.3

Spreading Rate (no application loss)
catalyzed
410-530 sq ft/gal @ 1.0-1.3 mils DFT

Drying (1.5 mils dft, 77°F, 50% RH): To
Touch: 15-20 minutes
To Handle: 20-30 minutes
To Sand: 45-60 minutes
To Recoat: 45-60 minutes
Force Dry: 30 minutes at 120°F or
10 minutes at 150°F

Flash Point: 60-65°F Pensky Mar-
ten Closed Cup

Mixing Ratio:
1 part F3 KEMVAR Plus Conversion
Varnish
5% (by volume) Catalyst V66V26

Pot Life: 120 hours/5 days

Package Life: 1 years, unopened

CHARACTERISTICS

(cont)

Air Quality Data:

- Non-photochemically Reactive
- Volatile Organic Compounds (VOC)
Theoretical as packaged, maximum, less
exempt solvents:
4.91 lb/gal, 589 g/L
- Volatile Hazardous Air Pollutants
(VHAPS) as packaged: <0.8 lb/lb of
solids

An Environmental Data Sheet is available from
your local Sherwin-Williams facility or at
www.paintdocs.com.

SPECIFICATIONS

Surface preparation

Wood - New Work (interior only):

Must be clean, dry, and finish sanded.
Substrate should be free of grease, oil, dirt,
fingerprints, and any contamination to ensure
optimum adhesion and coating performance
properties.
Moisture content of wood should be 6 to 8%.

Previously finished wood (interior only):

Strip old finishes completely and remove all
contaminants from the surface. Make sure
surface is dry. Finish as new work

Testing: The information, data, and
recommendations set forth in this Prod- uct
Data Sheet are based upon test re- sults
believed to be reliable. However, due to the
wide variety of substrates, substrate
properties, surface preparation methods,
equipment and tools, application methods,
and environments, the customer should test
the complete system for adhesion,
compatibility and performance prior to full
scale application.

APPLICATION

Typical Setups

Conventional Spray:

Air Pressure40-50 psi
Fluid Pressure 6-8 psi

Airless Spray:

Pressure 1200-1800 psi
Tip011-.015"

Air Assisted Airless:

Assist Air Pressure..... 10-25 psi Fluid
Pressure 400-800 psi
Cap/Tip011-.015"

HVLP:

Air Pressure 9 psi
Fluid Pressure 5-10 psi
Tip047

Reduce: Reduce 3-5% to adjust drying or build with butyl acetate(R6K18) or MAK (R6K30).

Retard: Retard 1-3% with 2-Butoxyetanol (R6K25) as required.

Cleanup:

Clean tools/equipment immediately after use with Butyl Acetate (R6K18) or MAK (R6K30). Follow manufacturer's safety recommendations when using any solvent.

KCMA Test Performance:

Cold Check Resistance:

Passes 20 cycles (KCMA spec is 5 cycles)

Moisture Resistance (KCMA test):

Pass 24 hours edge immersion in water/detergent solution at room temperature.

Print Resistance:

No print. Pigmented Varnish was air dried for 24 hours at room temperature (77°F) on maple at 3.0 mils dry film. Tested for 18 hours at 77°F at 1 psi in direct contact with 8 ounce duck cloth.

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ADDITIONAL INFORMATION

- Sher-Wood F3 KemVar Plus Conversion Varnish must be catalyzed 5.0% (by volume) with Catalyst V66V26 for cure. Do not over-catalyze. Higher catalyst levels may cause cracking over time. Higher catalyst levels affect crosslinking rates and film properties.
- When using F3 products, all equipment must be "tank clean", free of all other formaldehyde containing materials to maintain its formaldehyde free properties.
- Temperatures must be above 70°F during application and cure to ensure acceptable coating properties. Coatings cured at lower temperatures are prone to cracking, checking, and brittleness.
- If a primer surfacer is needed, use E63W350 / Sher-Wood F3 KEMVAR Surfacer. E63W350 may be required to fill the substrate for some open grain woods or lower quality MDF board.
- Do not apply over nitrocellulose lacquer sealers as they may cause wrinkling or long-term checking or cracking.
- Gloss White or Low Gloss White are intended for custom blending
- Catalyst V66V26 is an acid. To prevent acid corrosion and pitting, all equipment should be made of stainless steel. Containers and piping should be stainless steel or plastic. Acid reacting with iron or steel will cause a discoloration of conversion varnish.
- Maximum film thickness of the total system (including Surfacer) must not exceed 4 mils dry film because heavier films may cause cracking.
- Do not use in recirculating systems such as flowcoaters or curtain coaters because of accelerated cure due to aeration. Recirculating paint lines are okay.
- Maximum colorant level is 6 ounces per gallon with OptiColor XP or GIS colorants.
- To extend the pot life at the end of the 5 days, add 100% of uncatalyzed material. Add catalyst based only on the uncatalyzed portion when ready to use the next day.

ADDITIONAL INFORMATION

- Do not exceed 2.0 mils dry film per coat because heavy wet films may cause film surface imperfections and slow dry time.
- For full sharp gloss appearance, sand intermediate coats with very fine (400- 600) grit paper to prevent telegraphing of sand marks.
- For interior use only.

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.paintdocs.com.

Please direct any questions or comments to your local Sherwin-Williams facility

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