



**SHERWIN
WILLIAMS.**

Chemical Coatings

CC-F24

SHER-WOOD® Water White Conversion Varnish

Gloss V84V80
 Bright Rubbed Effect V84F81
 Medium Rubbed Effect V84F82
 Dull Rubbed Effect V84F83
 Catalyst V66V21

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>SHER-WOOD® Water White Conversion Varnish is a catalyzed wood finishing system providing water white color and good resistance to yellowing. It is recommended for use over white "pickled" and light color stains where good resistance to yellowing is required.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Water white color • UV absorber added to insure good resistance to yellowing • High Solids - 44% weight solids • High Build - 35% volume solids • Meets the Federal HAPS** standard for wood finishes • Meets the Federal Control Technique Guidelines (CTG) for VOC for conversion varnishes • Fast drying • Meets the test requirements of the Kitchen Cabinet Manufacturers Association (KCMA) • Self sealing - use the same product as a sealer • Will not blush like lacquer products • Process efficient - many three coat applications can be done in two coats because of its high solids and high build • Versatile - may be applied by conventional airless, air assisted airless, or electrostatic spray • Good "hang" on vertical surfaces • Excellent toughness and mar resistance • Excellent moisture resistance • Excellent resistance to household chemicals • Excellent cold check resistance • Ideal for kitchen cabinets, vanities, chairs, office furniture, and a wide range of interior wood products • Free of lead and chromate hazards • VOC compliant as packaged* <p>*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations. ** National Standards for Hazardous Air Pollutants (HAPS) Emissions for Wood Furniture Manufacturing Operations CFR40, Part 63, Subpart JJ</p>	<p>Gloss: Gloss -Full BRE - 55-60 units MRE - 34-38 units DRE - 17-21 units</p> <p>Weight Solids: 44 ± 2%</p> <p>Volume Solids: 35 ± 1%</p> <p>Viscosity: 17-22 seconds #2 Zahn Cup 14-18 seconds #4 Ford Cup</p> <p>Recommended film thickness: Mils Wet - 2.5 - 4.0 Mils Dry - 0.8 - 1.2</p> <p>Spreading Rate (no application loss) @ 0.8-1.2 mil dft: 460-690 sq ft/gal</p> <p>Drying (77°F, 50% RH): To Touch: 10-15 minutes To Handle: 15-30 minutes To Sand: 30-60 minutes To Recoat: 30-60 minutes</p> <p>Coating must be applied and dried at a temperature of 70°F or higher to ensure acceptable coating properties</p> <p>Force Dry: 5-20 minutes at 110-160°F</p> <p>Flash Point: 50°F Pensky-Martens Closed Cup</p> <p>Mixing Ratio, <u>Sealer</u>: 1 part Conversion Varnish 3% Catalyst V66V21 15% Butyl Acetate R6K18</p> <p>Mixing Ratio, <u>Topcoat</u>: 1 part Conversion Varnish 3% Catalyst V66V21 5% Butyl Acetate R6K18</p> <p>Reduce with Butyl Acetate, R6K18 or MAK, R6K30 to maintain HAPS compliance. Toluene, Xylene or High Flash Naphtha 100 may also be used, but are not HAPS compliant.</p> <p>Pot Life: 24 hours</p> <p>Package Life: 1 year, unopened</p> <p>Air Quality Data: Photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum <4.6 lb/gal, 550 g/L Hazardous Air Pollutants (HAPS) As catalyzed and reduced with Butyl Acetate R6K18 less than 0.8 lb. per pound of solids</p>	<p>Wood (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%.</p> <p>Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.</p> <p>Finishing System:</p> <ol style="list-style-type: none"> 1. Sealer—catalyze and reduce Varnish as a sealer. Spray a full wet coat. Air dry 30 minutes or force dry 5-20 minutes at 110°-160°F. Note: Sher-Wood® Vinyl Sealers T67F3, T67F5, T67F6 and T67F7 may also be used as a sealer under Water White Conversion Varnish. These sealers must be catalyzed. Consult the corresponding data page for details. 2. Sand with 220-280 grit paper, remove sanding dust. 3. Topcoat—Catalyze Sher-Wood® Water White Conversion Varnish as a topcoat. For more depth apply a second coat. 4. Allow overnight dry before packing or stacking. Force drying may be used. 5. Maximum dry film thickness of the system must not exceed 5 mils because heavier films may cause cracking. <p>An Environmental Data Sheet Is available from your local Sherwin-Williams facility</p>

APPLICATION

Typical Setups

Conventional Spray:

Air Pressure 40-50 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"

Electrostatic Spray:

Substrate must be conductive.

Note: HAPS Free Reducer R7K305 can be used to maintain low HAPS. MAK R6K30 and EEP R6K35 can be used to retard the coating system and maintain low HAPS. Acetone R6K9 can be used as a HAPS and VOC exempt solvent.

Cleanup:

Clean tools/equipment immediately after use Butyl Acetate, or HAPS free Lacquer Thinner R7K305.

Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Performance Tests:

Cold Check Resistance 20 cycles

Print Resistance No print
18 hours air dry, at 2 psi at 77°F in direct contact with 8 oz. duck cloth.

Household Chemicals Test

Panels were aged 30 days at 77°F, 5 drops of each item were placed under a watch glass for one hour. Film was rinsed with water, washed with warm water and soap, dried, and wiped with VM&P Naphtha to remove items not removed with water.

Household Ammonia	no visual effect
Vinegar	no visual effect
Lipstick	no visual effect
Lemon Juice	no visual effect
50% Ethyl Alcohol	no visual effect
Mercurochrome 2%	no visual effect
Red Ink	no visual effect
Washable Blue Ink	no visual effect
Mustard	no visual effect
Oil Base Paint	no visual effect
Latex Emulsion Paint	no visual effect
VM&P Naphtha	no visual effect
Turpentine	no visual effect
Orange Crayon	no visual effect
Carbon Tetrachloride	no visual effect
Mayonnaise	no visual effect
10% Sodium Carbonate	no visual effect
Sour Milk	no visual effect
Margarine	no visual effect
Butter	no visual effect
Water	no visual effect
Cooking fat	no visual effect

SPECIFICATIONS

Product Limitations:

- Sher-Wood® Water White Conversion Varnish must be catalyzed 3% with Sher-Wood® KemVar® Catalyst V66V21. Do not overcatalyze. Do not use any other catalyst.
- Do not use over conventional nitrocellulose lacquer sealers. Seal with Sher-Wood® Vinyl Sealers T67F3, T67F5, T67F6 or T67F7 catalyzed, or conversion varnish.
- KemVar® Catalyst V66V21 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.
- Do not use Sher-Wood® Catalyst V66V26.
- For interior use only.
- For laboratory furniture and the best chemical resistance properties, Super KemVar® "M" should be used.
- While catalyzed varnish remains a low viscosity liquid beyond 24 hours, it should not be used after 24 hours because a chemical reaction is taking place. The resultant film may have inferior cure and crosslinking and a tendency for long-term cold checking.
- To extend the use life at the end of the day, add 300-400% of uncatalyzed material. Add catalyst based only on the uncatalyzed portion when ready to use the next day. Refrigeration also extends the working potlife.
- Do not use in recirculating systems such as flocoaters or curtain coaters. Recirculating paint lines are acceptable.
- Temperature must be **above 70°F during application and cure** to ensure acceptable coating properties. Coatings cured a lower temperatures are prone to cracking, checking and brittleness.
- Do not pack or stack finished parts with less than the cure listed below:
Board Surface
Temperature Time
180°F 1/2 minute
or 150 °F 5 minutes
or 140°F 30 minutes
or 130°F 1 hour
or 100°F 8 hours
or 70°F+ 24 hours
This is the time required for minimum cure.
- Natural finished wood will change color on aging and exposure to light. This is a natural phenomenon. Clear finishes will not prevent the wood from changing color.
- Maximum dry film thickness of the coating system is 5.0 mils.

CAUTIONS

Thoroughly review product label for safety and cautions prior to using this product. A Material Safety Data Sheet is available from your local Sherwin-Williams facility. Please direct any questions or comments to your local Sherwin-Williams facility.

LABEL CAUTIONS

SEE CONTENTS STATEMENT ON LABEL.

Contents are FLAMMABLE. Vapors may cause flash fires. Keep away from heat, sparks, and open flame. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

VAPOR HARMFUL. Avoid breathing vapor and spray mist. Use only with adequate ventilation. Before initial use, consult OSHA's Standard for Occupational Exposure to Formaldehyde (29 CFR 1910.1048). A properly fitted, full face respirator effective for particulates, organic solvents and formaldehyde or an air supplied respirator must be worn, unless air monitoring demonstrates vapor/mist concentrations are below permissible levels. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet. If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use. If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention. If SWALLOWED: Call Poison Control Center, hospital emergency room, or physician immediately.

SPILL AND WASTE: Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Contains Formaldehyde - a potential cancer hazard. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

FOR INDUSTRIAL USE ONLY.

SEE MATERIAL SAFETY DATA SHEET.24390-051905.

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, The Sherwin-Williams Company cannot make any warranties as to the end result.