PRODUCT DATA SHEET

"V" Series Clear Conversion Varnish

V7391-39 Gloss (90°+) V7393-41 Satin (30°)
V7392-40 Semi-Gloss (55°)

DESCRIPTION

"V" Series Clear Conversion Varnish is a premium quality, water clear, high performance, two component synthetic coating that is specifically formulated for use on kitchen and bathroom cabinets, institutional furniture, and any other interior wood surface where there is a need for maximum durability and chemical resistance. This product meets all of the pertinent government regulations regarding emissions and exceeds the performance parameters outlined by KCMA and ASTM.

Product Advantages:

- User Friendly
- HAPs Compliant
- AIM Compliant
- Ultra Low Formaldehyde
- Ultra Low VOC
- Ultra High Solids
- Water Clear
- Resists Yellowing*
- Self-Sealing
- Moisture Resistant
- No Critical Recoat Time
- Catalyst Supplied in Pre-measured Containers
- AWI TR-4 When Applied Self-Sealing
- AWI TR-5 When Applied Over Gem-Seal Conversion Sealer
- Meets KCMA and ASTM requirements, when applied according to manufacturer's specifications.

*Will not protect wood, lightly stained wood substrates or pigmented basecoats from yellowing.

CHARACTERISTICS

Viscosity: 20 #4 Ford

Weight Solids: 45%

Volume Solids: 37%

Weight/Gallon: 8.13lbs/gal.

Color: <1

VOC (Reg/Coating): 4.45 lb/gal or 533 g/l

VOC (Actual/Material): 4.45 lbs/gal or 533 g/l

HAPs: .7066-.7209

Film Hardness: HB Overnight

Catalyst: C7302 @ 5oz or 148 ml per gallon.

Coverage: 575 sq. ft. per gallon at one mil dry film thickness

Dry Time: Air Dry: at 78°, relative humidity 50%; **To Touch**: 10-15 minutes; **To Handle**: 15-30 minutes; **To Sand/Recoat**: 15-30 minutes. Relative humidity will affect the speed of drying. Ideal conditions are 75° or warmer at 50% humidity or less. Dry time will be faster at higher temperatures and lower humidities, and equally slower at colder temperatures and higher humidities.

***Caution:** Blistering may occur if adequate dry time is not allowed. These varnishes should flash at least 25 minutes before exposing to heat, for a one coat system. Longer flash times may be required for higher wet film thickness.

Pot Life: 8 hours @ 77° F

Shelf Life: 12 months if uncatalyzed, unopened and stored in a cool dry area. Always rotate stock.

SPECIFICATIONS

Surface Preparation: New wood: Remove any dirt, grease, glue or other contaminants and sand wood as required. Moisture content of wood should be 7-9%. **Old wood**: Strip old finishes completely and remove all contaminants from the surface. Make sure the surface is dry, sand as required. Finish as new work.

Material Preparation: Catalyze "V" Series Clear Conversion Varnish with pre-packaged catalyst kit in a stainless steel or plastic lined container. Mix or agitate thoroughly before use. Allow 20 minutes for induction time before spraying. Reduction may be required for certain types of application. Xylene or Toluene may be used for reduction. If used in an area where HAPS is an issue use SOL-9011 HAPS Free Thinner. If a slower dry time is desired, use only SOL-9012 HAPs Free Retarder.

Application: "Clear Conversion Varnish is designed for spray application. Temperature will affect viscosity. All products are designed to achieve the highest possible solids content at a viscosity low enough to allow proper spray atomization without the addition of costly chemical solvents. It is recommended that this product be applied 3-4 wet mils per coat with a maximum of three coats for the total coating system. It may be applied as a self-sealing system or a high quality conversion sealer, such as CVS-0100, may be used as the first coat. **Maximum dry film thickness should not exceed four mils.**

Clean Up: Use #500 Lacquer Thinner or SOL-9011 HAPs Free Lacquer Thinner to clean all equipment. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

Note: These numbers represent actual control values on a smooth, sanded substrate. Spray techniques, texture, and sealing as well as film thickness may give different results on actual work, but they may be used for comparison. To the best of our knowledge, the above technical data is true and accurate at the date of issuance but is subject to change without prior notice.

Date: Oct-06

Product Performance:
The **KCMA (Kitchen Cabinet Manufacturers Association)** test was conducted with the test panel in a vertical position. Each test panel was prepared as specified in the application instructions above. 3cc's of each chemical were placed on the coated surface and allowed to remain there for a period of 24 hours, with the exception of mustard, which was removed from the panel after one hour.

The **ASTM (American Society for Testing Materials)** test was conducted with the test panel in a horizontal position. Each test panel was coated as specified in the application instructions above. 3cc's of each chemical were placed on the coated surface and contained there by the use of a watch glass for a period of sixteen hours unless otherwise indicated.

The **AWI (Architectural Woodwork Institute) Chemical Resistance Test** is conducted by containing the test panel in a horizontal position while applying 1 milliliter of various chemicals to the surface of the coating. Each chemical is maintained at its respective location on the panel by the use of a watch glass. All chemicals are allowed to remain in contact with the coating surface for a period of 16 hours unless otherwise indicated.

Each chemical is then evaluated for its impact upon the coated surface, which includes such parameters as loss of gloss, discoloration, blistering, and delamination. The chemicals used and their respective effects upon the coating are as follows:

	KCMA Test		ASTM Test		AWI Test	
	Initial Results	**Final Results**	**Initial Results**	**Final Results**	**Initial Results**	**Final Results**
Catsup	No damage	No damage	No damage	No damage	N/A	N/A
Vinegar	No damage	No damage	No damage	No damage	N/A	N/A
Alcohol	No damage	No damage	No damage	No damage	N/A	N/A
Olive Oil	No damage	No damage	No damage	No damage	No damage	No damage
2% Ammonia	No damage	No damage	No damage	No damage	N/A	N/A
Lemon Juice	No damage	No damage	No damage	No damage	No damage	No damage
Coffee	No damage	No damage	No damage	No damage	No damage	No damage
Mustard	No damage	No damage	No damage	No damage	Slight discolor	No recovery
Water	No damage	No damage	No damage	No damage	N/A	N/A
Motor Oil	N/A	N/A	No damage	No damage	N/A	N/A
Lighter Fluid	N/A	N/A	No damage	No damage	N/A	N/A
1% Palmolive Solution	N/A	N/A	No damage	No damage	No damage	No damage
1% Tide Solution	N/A	N/A	No damage	No damage	N/A	N/A
4% Sodium Hydroxide	N/A	N/A	N/A	N/A	No damage @ 1 hour	No damage
10% Sodium Hydroxide	N/A	N/A	N/A	N/A	No damage @ 1 hour	No damage
28% Ammonia	N/A	N/A	N/A	N/A	No damage	No damage
10% Sodium Phosphate	N/A	N/A	N/A	N/A	No damage	No damage
95% Ethyl Alcohol	N/A	N/A	N/A	N/A	No damage @ 1 hour	No damage
Tomato Juice	N/A	N/A	N/A	N/A	No damage	No damage
50% Sulfuric Acid	N/A	N/A	N/A	N/A	No damage @ 1 hour	No damage
Nail Polish Remover	N/A	N/A	N/A	N/A	No damage	No damage
Glacial Acetic Acid	N/A	N/A	N/A	N/A	No damage @ 1 hour	No damage

KCMA 9.2 Hot and Cold Check Resistance Test:
All panels passed 21 cold check cycles (cycling from 120 °F. to –5°F. and 70% Relative Humidity to zero Relative Humidity).

KCMA 10.0 Detergent Water Resistance Test:
Passes 24 hours