



PRODUCT DATA SHEET

Gem Var[®] Conversion Varnish Tint Base

350-0004	Semi Gloss Clear (60°)	350-0007	Satin Clear (35°)
350-0005	Semi Gloss White (60°)	350-0008	Satin White (35°)
350-0006	Semi Gloss Deep (60°)	350-0009	Satin Deep (35°)

DESCRIPTION	CHARACTERISTICS	SPECIFICATIONS
<p>The ULTIMATE in wood finishing technology in pigmented bases, which can be tinted to virtually any color with industrial colorants. Gem Var Conversion Varnish Tint Base is a non-yellowing catalyzed varnish with a 21-day pot life! Truly “state of the art” technology offering the highest of quality in an easy to use package. Gem Var may be used self-sealing or if a primer is desired, apply one coat of 110-0005 Gem Prime White Precatalyzed Primer or one coat of 150-0002 Gem Prime White Conversion Primer and one or two coats of Gem Var White Conversion Varnish Tint Base. It addresses environmental and safety concerns by its low HAPs and VOC formulations. This product meets all of the pertinent government regulations regarding emissions and exceeds the performance parameters outlined by KCMA and ASTM.</p> <p>Product Advantages:</p> <ul style="list-style-type: none"> ➤ HAPs and AIM Compliant ➤ Ultra Low Formaldehyde ➤ User Friendly ➤ 21 Day Pot Life ➤ Controlled Tint Strength ➤ Can be Tinted to Virtually any Color Using Industrial Colorants ➤ Extremely Durable and Moisture Resistant ➤ Non-Yellowing ➤ Silky Smooth Feel ➤ No Critical Recoat Time ➤ Catalyst Supplied in Pre-Measured Containers ➤ AWI OP-4 When Applied Self-Sealing ➤ AWI OP-5 When Applied Over Gem Prime ➤ Exceeds KCMA and ASTM Performance Requirements, When Applied to Manufacturer’s Specifications 	<p>Viscosity: 350-0004,5,6,7,9 19-21 #4 Ford 350-0008 24 #4 Ford</p> <p>Weight Solids: 34% - 48%</p> <p>Volume Solids: 27% - 31%</p> <p>Weight/Gallon: 7.82 – 9.39 lbs/gal</p> <p>Film Hardness: HB Overnight</p> <p>VOC (Reg/coating): 4.82-5.13 lbs/gal or 578- 615 g/l</p> <p>VOC (Act./material): 4.82-5.13 lbs/gal or 578- 615 g/l</p> <p>HAPs: .38 - .68</p> <p>Coverage: 433 – 502 sq ft per gallon at one mil dry film thickness</p> <p>Dry Time: 12 minutes <i>(Note: relative humidity and temperature will effect dry time)</i></p> <p>Catalyst and Short Fill amounts: 350-0004 & 350-0007 short filled at 112 ounces, catalyze @ 3.5oz of C7302 per gal. 350-0005 & 350-0008 short filled at 124 ounces, catalyze @ 3.88oz of C7302 per gal. 350-0006 & 350-0009 short filled at 120 ounces, catalyze @ 3.75oz of C7302 per gal.</p> <p>Pot Life: 21 days @ 77° F</p> <p>Shelf Life: 12 months if uncatalyzed, unopened and stored in a cool dry area. Always rotate stock.</p> <p><i>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.</i></p>	<p>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.</p> <p>Material Preparation: Catalyze Gem Var White Conversion varnish with pre-packaged catalyst kit in a stainless steel or plastic lined container. Mix or agitate thoroughly before use. Reduction may be required for certain types of application. SOL-9011 HAPs Free Thinner should be used for reduction. If a slower dry time is desired, use only SOL-9012 HAPs Free Retarder.</p> <p>Application: Gem Var Conversion Varnish Tint Base 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. We recommend a coating system comprised of 2-3 coats of Gem Var Conversion Varnish Tint Base at 3-4 mils wet film build per coat. Maximum dry film thickness should not exceed four mils. This product is designed to be tinted with Industrial Colorants such as the Degussa 844 colorant line. These colorants should be added at levels not to exceed 8% by volume.</p> <p>Clean Up: Use #500 Gem Coat Lacquer Thinner or SOL-9011 HAPs Free Thinner to clean all equipment. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.</p>

The following supersedes any provision contained in the forms, letters and papers of your company. This product is designed and intended for professional application only. All products should be thoroughly tested under application conditions prior to use. The information contained herein is believed to be reliable. **HOWEVER, GEMINI MAKES NO WARRANTY CONCERNING THIS PRODUCT, WHETHER EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** UNDER NO CIRCUMSTANCES SHALL GEMINI BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR ANY OTHER DAMAGES FROM ALLEGED NEGLIGENCE, BREACH OF WARRANTY, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY, ARISING OUT OF THE USE OR HANDLING OF THIS PRODUCT. THE SOLE REMEDY OF THE BUYER AND THE SOLE LIABILITY OF GEMINI FOR ANY CLAIMS SHALL BE LIMITED TO THE BUYER'S PURCHASE PRICE OF THE PRODUCT WHICH IS THE SUBJECT OF THE CLAIM OR THE AMOUNT ACTUALLY PAID FOR SUCH PRODUCT, WHICHEVER IS LESS. TECHNICAL ADVICE FURNISHED BY GEMINI SHALL NOT CONSTITUTE AN EXPRESS WARRANTY, WHICH IS EXPRESSLY DISCLAIMED. ALL TECHNICAL ADVICE GIVEN IS ACCEPTED AT THE RISK OF THE BUYER.

CAUTION: DANGER! FLAMMABLE! VAPORS MAY CAUSE FLASH FIRE. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. INJURIOUS TO EYES. KEEP OUT OF THE REACH OF CHILDREN! BEFORE using this product it is essential that the “Material Safety Data Sheet” describing the product as well as the “Product Label” be reviewed. If your company does not have such information or has any questions, contact the manufacturer.

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	Slight Discoloration	No Recovery	No Damage @ 1 hr	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	Slight Discoloration	Full Recovery	No Damage @ 15 minutes	No Damage	No Damage @ 1 hour	No Damage
Mustard	Slight Discoloration	No Recovery	No Damage @ 15 minutes	No Damage	Slight Discoloration	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 @ 15 minutes	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	No Damage
Tomato Juice	N/A	N/A	N/A	N/A	No Damage @ 15 minutes	No Damage
50% Sulfuric Acid	N/A	N/A	N/A	N/A	No Damage @ 15 minutes	No Damage
Nail Polish Remover	N/A	N/A	N/A	N/A	No Damage @ 1 hour	No Damage
Glacial Acetic Acid	N/A	N/A	N/A	N/A	No Damage @ 1 hour	No Damage

KCMA 9.2 Hot & 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).