PRODUCT DATA SHEET

Gem Cryl® Clear Acrylic Lacquer

500-0037	Gloss	500-0039	Satin
500-0038	Semi-Gloss	500-0040	Flat

DESCRIPTION

Gem Cryl Clear Acrylic Lacquer represents our best grade of acrylic lacquer. It outperforms virtually all acrylic lacquers in the area of moisture resistance, chemical resistance, flexibility and clarity. Gem Cryl may be used as a self-sealing system or over Gem Seal Precatalyzed or Conversion Sealer for added moisture resistance. When applied over Gem Seal Precatalyzed or Conversion Sealer, it exceeds KCMA performance tests.

Product Advantages:

- User Friendly
- HAPs Compliant
- Outstanding Mar Resistance
- Good Moisture and Chemical Resistance
- Silky Smooth Feel
- Water Clear
- Resists Yellowing
- Contains U.V. Absorbers
- Exceeds KCMA Performance Requirements, When Applied to Manufacturer's Specifications
- VOC Compliant
- Non Photo Chemically Reactive

CHARACTERISTICS

Viscosity: 24" #4 Ford

Weight Solids: 22%

Volume Solids: 16%

Weight/Gallon: 7.44 lbs/gal

Film Hardness: 3B Overnight

Color: <1

VOC (Reg/coating): 5.67 lb/gl or 679 g/l

VOC (Act./material): 4.91-4.95 lb/gl or 583-594 g/l

HAPs: .4225 -.4797

Coverage: 258-265 sq ft per gallon at one mil dry film thickness

Dry Time: 10-15 minutes

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

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.

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:
Gem Cryl Clear Acrylic Lacquers are ready to use as packaged. Mix or agitate thoroughly before use. Reduction may be required for certain types of application. If a slower dry time is desired, use only SOL-9012 Haps Free Retarder at a level not to exceed 4% by volume.

Application:
Because of the short dry time this product must be applied with professional spray equipment. This product is used as a self-sealing system. When used as a self-sealing system we recommend no more than 3 coats and not to exceed 4 mils wet film build per coat. When used in conjunction with our Clear CAB Acrylic Sealer (200-0025) recommend 1 coat of Acrylic Sealer not to exceed 3 mils wet film build and no more than 2 coats of Clear CAB Acrylic not to exceed 4 mils wet film build per coat. Total dry film build of the complete coating system is not to exceed 3 mils.

Clean Up:
Use #500 Gem Coat 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.

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: Nov. 2011

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		
2% Ammonia	No Damage	No Damage	No damage @ 1 hr	No Damage	N/A	N/A
Lemon Juice	No Damage	No Damage	No Damage	No Damage		
Coffee	No Damage	No Damage	No Damage	No Damage		
Mustard	No Damage	No Damage	No damage @ 15 minutes	No Damage		
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		
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		
10% Sodium Hydroxide	N/A	N/A	N/A	N/A		
28% Ammonia	N/A	N/A	N/A	N/A		
10% Sodium Phosphate	N/A	N/A	N/A	N/A		
95% Ethyl Alcohol	N/A	N/A	N/A	N/A		
Tomato Juice	N/A	N/A	N/A	N/A		
50% Sulfuric Acid	N/A	N/A	N/A	N/A		
Nail Polish Remover	N/A	N/A	N/A	N/A		
Glacial Acetic Acid	N/A	N/A	N/A	N/A		

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