PRODUCT DESCRIPTION

GOLDEN Archival Varnish is formulated with 100% solvent-based, reversible acrylic co-polymer resins. It is designed to produce a flexible, clear film to protect against environmental concerns such as ultraviolet light, dirt and moisture. The cured coating is resistant to yellowing.

GOLDEN Archival Varnish Mineral Spirit Acrylic Aerosol w/UVLS is made by reducing standard **GOLDEN MSA Varnish (w/UVLS)** with fast drying acetone and a propellant to create an easy to use spray product. Properly applied, it can create a durable, even film.

GOLDEN Archival Varnish should adhere well to most non-oily surfaces. It may exhibit poor adhesion to fresh oil paint films or if residual surfactants are present with water-based paint films. It has excellent wet and dry state clarity. Over time, the MSA film resists changes in appearance and remains flexible. The UV protection is achieved from a blend of Hindered Amine Light Stabilizer (HALS) and an ultraviolet absorber (substituted benzotrizole compound). The unique adjustable fan spray tip allows precise application with reduced overspray. Coverage is approximately 30-35 sq. ft. per can.

General Aerosol Directions

USE ONLY IN WELL VENTILATED AREAS.

- For best results, both can and spraying area should be 65-75 o F.
- Shake can 2 minutes prior to initial use.
- Re-shake 10 seconds after each minute of use.
- Avoid spraying in crosswind, direct sun or heat.
- Ensure nozzle is pointing safely away from face before starting.
- After spraying, turn can upside-down and flush out spray varnish (5 to 8 seconds).
- Allow for sufficient curing time to prevent materials from sticking to the surface.

Proper Spraying Technique

- The adjustable fan tip comes set for a side-to-side spraying motion. Adjust for other spraying directions, such as diagonal or up and down.
- Start and stop spraying beyond area to be varnished, and sweep across surface.
- Generally a light spray (achieved with light tip pressure) is preferred. Fully depressing the nozzle tip creates a heavier spray, which can be beneficial on larger objects.
- Spray several light coats in a consistent manner. Singular heavy coats may result in unevenness.
- Maintain a consistent distance (9-12 inches from substrate surface) and an even 90 o angle.
- The surface should feel tack-free before recoating. Allow a minimum of 15-20 minutes between coats.
- Change spray direction or turn object between coats to minimize lap marks.
- Coats may be built up indefinitely depending upon needs. After last coat, allow several hours before handling.

Adjusting and Cleaning Spray Tip

- The fan tip starting position is for a side-to-side spraying motion.
- Use needle nose pliers to carefully adjust nozzle for the intended direction of spray pattern.
- Dried product may be cleaned from the tip with a soft cloth and pure mineral spirits or turpentine.
- If tip clogs, remove from can and soak in pure mineral spirits or turpentine for 10 minutes.
- Never insert pins or needles into nozzle.

VARIOUS MEDIA APPLICATION METHODS

Different paints and substrates have unique circumstances. GOLDEN Archival Varnish w/UVLS should be used in accordance with these individual requirements. **ALWAYS TEST ON SCRAP PIECES OR INCONSPICUOUS AREAS BEFORE USE ON FINAL ARTWORK.** Absorbent substrates require several **gloss** layers to seal the surface. Listed below are general application guidelines for common substrates. For more thorough information regarding specific media concerns, review artist handbooks and other information sources.

Acrylic Paints - isolation coat(s) should be applied as per MSA Varnish directions located in the main GOLDEN Varnish document. Allow 24 hours for the final isolation coat layer to cure and then build layers of Archival Aerosol Varnish w/UVLS as needed.

Oil Paints - allow minimum curing time of 6-12 months when used as a final picture varnish and allow the painting to become touch-dry before use as a temporary varnish on fresh oil paint films. Heavy layers on fresh oil paint films impede the oxidation process, which may result in failure. Build layers of Archival Varnish w/UVLS as needed.

Graphite/Pastels/Colored Pencil/Marker - both the media and the substrate should be taken into consideration. Test all brands and colors to avoid bleeding or darkening of colorants. Begin by *applying **very** light coats of **gloss** varnish* as a fixative. Once enough light layers create a dried glossy film, begin layers of desired sheen in subsequent coats.

Watercolors/Gouache - *apply **very** light coats of **gloss** varnish* until surface is sealed. Then apply desired sheen layers.

Ink Jet Prints - generally, GOLDEN Archival Varnish w/UVLS may be applied directly to prints; however consider substrate absorbency (see above notes) and intended level of protection (refer to UV protection section below). Several thin coats are sufficient for moisture resistance, but testing should be conducted if water-based gels are going to be applied over the varnish for brush-stroke texture.

VARNISHING FOR UV PROTECTION

GOLDEN Archival Varnish contains UltraViolet Light Stabilizers (UVLS) to protect materials from damaging light sources. However, spray coats are very thin compared to brush coats. The amount of varnish ***above*** the substrate and colorants is directly related to the level of UV resistance and the degree of fading due to light sources. When UV protection is required from this product, allow time to build up multiple coats. Testing shows 6 Archival Varnish w/UVLS coats are required to impede color shift of fugitive materials. When multiple spray coats is impractical, consider brush applying 2 or more coats of GOLDEN MSA Varnish (Gloss) if considerable UV protection is critical. After sufficient coats are built up, use GOLDEN Archival Varnish to develop the desired sheen. Refer to GOLDEN Information Sheet "***Protecting Computer Generated Prints from U.V. Rays*** " for further instructions.

TROUBLESHOOTING

Becoming proficient in varnishing requires practice. Before varnishing important work, practice on a similar piece until satisfactory results are achieved. For the most even application, carefully spray light coats, developing a desired thickness. It is unnecessary to apply singularly thick coats to achieve an even finish, as each layer reactivates previous layers and forms a continuous film.

Uneven Coating

Irregular appearances can be the result of several issues:

- improper shaking of can prior or during use
- not maintaining proper distance from substrate
- incorrect angle of spray
- overly heavy single coatings
- windy conditions
- improper product or room temperature
- insufficient drying time between coats

GOLDEN Archival Varnish w/UVLS requires properly applied layers; each spray coat carefully and lightly developed, and it is not uncommon for the initial layers to have an incomplete looking film. Practicing is key to know what to expect during varnishing. If a layer is misapplied, there may be ways to correct it, but there may be instances where removing the varnish is required. Understand what caused the inconsistencies and take proper action before proceeding with additional coats.

Runs/Sags/Drips

Excessive single film building (vertical and angled applications) can result in runs forming in the varnish layer. Avoid heavy single coat films whenever possible. The remedy for fixing runs is to recoat the work when it's laid down on a horizontal surface and allow the solvent to reactivate and level the run. Varnish removal may be required in extreme cases.

Spattered Layer

A spattery dried surface is usually caused by:

- Improper shaking before spraying
- Clogged nozzle. Remove nozzle button and soak in pure mineral spirits or turpentine
- Temperature of either the can or the spraying area was too cold
- Spraying is started over artwork instead of beyond painting. Remember to start and finish beyond the perimeter of the artwork to avoid initial spattering.

In most cases, subsequent coats applied correctly should even out the surface.

"Frosted" Appearance

Substrate was still too absorbent when Satin or Matte Varnish was applied resulting in the matting agents remaining exposed on surface. Allow the coat to dry, and apply a gloss layer to return clarity. Apply additional gloss layers if the surface still appears to be absorbing varnish. Once the surface is sealed with gloss, return to applying desired sheen coats.

"Fish Eyes" / "Orange Peel" / "Cratering"

Surface defects are usually caused by a contaminated surface. Minor occurrences may be corrected by subsequent recoats, however significant contamination must be addressed by removing the varnish and properly cleaning the surface with an appropriate solvent. Once the contamination is eliminated, revarnish.

Crazing/Fissures/Surface Cracks

Applying multiple coats of varying sheens may result in the development of tiny cracks or fissures. These are normally caused by force drying layers or applying the last coat before the underlying layers have sufficiently cured. Wait for all layers to fully dry and begin applying lighter coats until fissures have subsided. Extreme cases may require complete varnish removal. Varnish may be removed for conservation, cleaning and repainting purposes. For complete removal instruction and considerations, contact GOLDEN at 1(800) 959-6543 or visit the Web site to access MSA Varnish Removal information.

HEALTH & SAFETY

These products **Conform to ASTM D 4236** , part of a federal regulation requiring toxicological review of art materials for *known* chronic health hazards. Some products in this line may present risks, so read labels carefully. Also, some product labels carry California Prop 65 warnings, which provide notification of the presence of carcinogens and reproductive toxins, regardless of the degree of risk. **Always protect yourself against known and potentially unknown chronic hazards of GOLDEN and other chemical products by keeping them out of your body. Do this by avoiding ingestion, excessive skin contact, and inhalation of spraying mists, sanding dusts and concentrated vapors. Contact us for further information.**

DISCLAIMER

The above information is based on research and testing done by Golden Artist Colors, Inc., and is provided as a basis for understanding the potential uses of the products mentioned. Due to the numerous variables in methods, materials and conditions of producing art, Golden Artist Colors, Inc. cannot be sure the product will be right for you. Therefore, we urge product users to test each application to ensure all individual project requirements are met. While we believe the above information is accurate, **WE MAKE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**, and we shall in no event be liable for any damages (indirect, consequential, or otherwise) that may occur as a result of a product application.

© Golden Artist Colors, Inc.