



Porcelain Restoration Glaze



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GOLDEN Porcelain Restoration Glaze is useful for repairing fine porcelain. The Glaze is fast drying, sandable, and can be brushed or sprayed in multiple layers.

Product History

GOLDEN Porcelain Restoration Glaze was developed for restorers.

GOLDEN developed Porcelain Restoration Glaze at the request of several restoration companies looking for a system to replace the solvent-based coatings being used at the time. They needed a Porcelain Glaze that was waterborne, fast-drying and developed a hard, tack-free film. It had to be sandable and capable of being applied in multiple coats, either by hand or with an airbrush. A Gloss version with an intense sheen was required to mimic a glazed porcelain film, while the Matte product could not interfere visually with the underlying color. As with many restoration products, it also needed to be removable (see instructions below).

Product Description

GOLDEN Porcelain Restoration Glaze is a reversible, water-based coating which is made in Gloss and Matte finishes. It is used to repair fine porcelain objects, such as dishes, figurines and dolls.

GOLDEN Porcelain Restoration Glaze is intended for repairing non-functional objects only. It is not intended for use on items which may be washed or hold food.

Product Application

Brush Application:

For use as a size, the Porcelain Restoration Glaze should not require thinning. However, it may be thinned with water to a suitable viscosity. Over-thinning may result in poor film formation or the need for multiple coats to fill cracks.



For color additions and final coatings, thinning with water is recommended. Depending on the viscosity of the product being used, the amount of water needed will vary. Matte Porcelain Restoration Glaze is thicker and requires more thinning than the Gloss version. Over-thinning may result in sagging and runs.

Spray Application:

Thinning is required for spray application and is dependent on several factors. The most important are the type of spray equipment and the amount of air pressure being used. If using equipment with larger nozzles, such as automotive retouch spray guns, less thinning will be required than when using a smaller-nozzled airbrush. The airbrush is the typical method of spray-application. A single action airbrush with a nozzle opening of .2mm opening (fine) may require thinning the Porcelain Restoration Glaze with equal parts water. Testing your equipment at the desired air pressure is recommended. Over-thinning may result in sagging or runs in the film.

Use as a "Size":

GOLDEN Porcelain Restoration Glaze can be used to fill in minor cracks such as when pieces are glued together. Brush-apply the undiluted product to fill in the cracks, then sand with a fine sandpaper until smooth. Testing various grades and types of sandpaper is recommended before employing this technique on an actual object to be restored. After the crack is filled, the resulting film is smooth, and any further repairs such as inpainting are made, apply several thinned coats of GOLDEN Porcelain Restoration Glaze to return the object to its original luster (see final coating instructions below).

Color Additions:

Any line of GOLDEN Acrylic Paint can be added to the GOLDEN Porcelain Restoration Glaze. Only a minimal amount should be added since the colors typically contain softer resins. GOLDEN Airbrush Colors provide the most intense color additions and have the hardest acrylic film of the GOLDEN paint lines. The Airbrush Colors also provide the best removability. When selecting which color to use, refer to the Lightfastness Rating of the pigments, as some colors are more fugitive than others. This rating is located on the label of each container, or can be found in the GOLDEN Pigment Identification Chart.

Final Coating:

GOLDEN Porcelain Restoration Glaze can be applied in multiple layers to develop a high luster. Building up several layers of the Gloss will produce a good sheen, which may be further buffed to develop even higher reflectance. Spray application is recommended since it will produce the smoothest film (see above for mixing instructions). Application of multiple coats is achievable but requires adequate drying between layers. Hair dryers and heat-lamps can be employed to speed drying, but caution should be taken to avoid excessive heat or airflow, which can damage the overall sheen of the film.

Due to the reversible nature of the film, each subsequent layer of GOLDEN Porcelain Restoration Glaze will re-introduce moisture and alkalinity to the ones underneath it. This in turn will slow the drying time as multiple layers are built up. Multiple coats will require delicate handling until the entire film is fully cured, which may take several days in extreme cases. Thicker layers require additional curing time as well, and it is advisable to apply several thin layers rather than one thick coating.

Final Curing should be achieved using a heat lamp. Although the piece may feel dry, it is not cured until all of the water and surfactants have been driven out of the film. To accomplish this, allow the object to dry to the touch, and place it under a heat lamp for 2 to 4 hours. Avoid getting the object too hot. It should only feel warm. If this procedure is not done, it may lead to later softening of the film, especially in more humid climates. If a piece does become softer over time, follow the final curing procedure under the heat lamp to return its hardness, and advise the client to consider placing the object in a climate-controlled chamber.



Additional Suggestions

Cleaning of the Restored Object:

Restored objects should be stored with the utmost care and protection from the sun's UV rays and other harsh environmental conditions. Should the piece become dusty, **any method to remove the contaminant without water or solvents is advised as the first approach**, (i.e. using a feather-duster or soft, cotton cloth). A small amount of mild soap and water gently applied with a cotton cloth is the next best method. **Avoid any ammonia-based cleaning product, as this will resolublize GOLDEN Porcelain Restoration Glaze.** If the contaminant will not remove after the mild soap solution cleaning, it is advised that the owner hire a restorer or a professional art conservator to finish the job.

Removing Porcelain Restoration Glaze:

If the GOLDEN Porcelain Restoration Glaze needs to be removed to reverse restoration work due to dirt impregnation into the film or other negative circumstances, follow this removal procedure:

Mix a solution of household ammonia (do not use ammonia that contains scents or soaps) and water in equal parts. Soak clean, white, cotton material (T-shirt material works well) in the solution and gently wring out. The cloth should be damp, not overly drenched. The size of the cloth should be directly related to the size of the area to be removed. If a cotton swab is used, caution is advised, as the fibers may imbed themselves into the outer film upon drying.

Lay the cloth over the glazed section and allow several minutes for the glaze to resolublize. Gently roll the cloth off the area and repeat with another clean cloth piece until the film is completely removed. This procedure should be practiced several times before attempting on an actual restored object.

Health & Safety

Based upon toxicological review, there are no acute or known chronic health hazards with anticipated use of this product (most chemicals are not fully tested for chronic toxicity). Always protect yourself against potentially unknown chronic hazards of this 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.

Conforms to ASTM D 4236

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