

# **Technical Information Sheet**

## Bright Gold or Premium Gold NM805 or NM801

(Low Odor, Low Toxicity) / For brushing.

### GENERAL INFORMATION

This liquid gold is a bright gold that has low odor and low toxicity.

After firing, gold shows a warm yellow color.

Standard firing temperature Pottery and Ceramics Cone 018.

Porcelain, Bone China High fired hard glazes 720-850 °C or 1329 F to 1562 F or from cone 018 to cone 012.

The firing result depends on the firing temperature, the total cycle time, the soak time as well as the glaze chemistry of the glaze decorated. To achieve an optimal firing result, we

recommend firing tests under the users own individual conditions.

### **Processing**

This liquid gold is ready to use. The material can be applied without further thinning and is distinguished by its excellent application properties and a sharp outline. Don't use traditional Solvent based Essence. These products will require K-117 available from New Mexico Clay.

#### Storage

This gold liquid can change over time. Therefore, it is recommended to use it within 9 months. This gold liquid should be stored in a cool, dark place. Refrigeration, if possible, will positively affect the shelf life.

### Coverage

The coverage of this gold liquid depends on the thickness of the applied precious metal layer. The average is about a square 11" x 11".

#### **Abrasion resistance**

This liquid gold shows moderate scratch resistance. No dishwasher, hand washing is advised.

## **Oxidation resistance**

This gold solution does not contain silver, so there is no risk of tarnishing.

## How to use, Application tips:

## Preparation of the surface to be decorated.

Make sure that the surface of the object to be decorated is clean and dry. Dust, fingerprints and condensation can affect the decoration during firing. Make sure that the object is not brought from a cold place to a warm place. A microscopic condensation film that is not visible to the naked eye may occur. This causes firing disturbances (pinholes) in the fired precious metal decorations. Allow enough time for the object to reach room temperature.

## How to use:

Work in a well-ventilated room at a good room temperature.

Use a natural hair brush such as Red Sable.

Remove from the bottle as much as you can consume within 30 minutes and close the bottle. Think of it as a slow increase in viscosity due to the continuous evaporation of the solvent in the air. Apply it to the object to be decorated with a moderate layer thickness. If the layer is too thin, the surface may be reddish and devoid of golden features. If the layer is too thick, it can lead to cracks, blisters, or matte surfaces. It is recommended that you don't clean your brush. Just wrap it in aluminum foil and the next time you need it just add a couple drops of the gold luster to the brush mash it around and then keep using it it's not a good idea to throw gold away.

## Firing

At the first heating stage, the organic component of the liquid gold burns out. This process is completed at about 750 F 400°C The gold film is formed. Constant slow temperature rise, enough Oxygen and sufficient ventilation determine the quality of the fired precious metal decoration. Firing conditions significantly affect the mechanical and chemical properties of the fired decoration.

A normal/natural cooling cycle should be used, and don't overcrowd the kiln.

Typical defects, root causes and countermeasures

Defect	Possible Cause	Solution
Blurred contours, running.	Too much thinning, the thinner was too thick or drying too slowly. Too much gas in the furnace. We're not enough air.	Leave the bottle open for a while so that some of the solvent can evaporate. Don't load the kiln so full.
Difficult to apply	Viscosity is too high after long application or long storage	Then the product with the correct thinner
Spots	Contamination as dust fingerprints or water condensation	Carefully clean the object you are decorating Usually with isopropyl alcohol
Problems with firing	Bad atmosphere in the kiln, insufficient ventilation, heat increase up to 700 degrees Fahrenheit too fast	Allow for more air, improve ventilation, slow down the firing, reduce the number of objects in the kiln
Gold peeling	Dirty surface or the layer of liquid gold was too thick	Make sure your piece is clean, thin the product
Gold wipes off	The firing temperature is too low for the type of glaze used. Or the layer of liquid gold is too thin.	Increase the firing temperature increase the layer thickness.
Small Pin holes	Pin holes can be caused by moisture on the surface of the glaze. Transferring things from a cool place to a warm place causes invisible condensation on the surface	Allow enough time for the where to reach room temperature so that the condensation has time to evaporate.

New Mexico Clay 3300 Girard NE Albuquerque NM 87107 Phone 800-781-2529

Local 505-881-2350

**Hours: MST** 

M-F: 9:00am-5:00pm Sat: 10:00am-4:00pm

SDS is available https://nmclay.com/informational-pages/safety-data-sheets-msds

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