U-NAMEL®

A new method of enameling utilizing fast curing ultraviolet sensitive material

ADVANTAGES:

No firing
Cures in 1-5 minutes
Scratch, wear & shock resistant surface
Does not chip, crack, flake, peel or shrink
Easy to drill, grind, polish, carve or sand and can be turned-on high-speed lathes.
Simple to mix colors, to create virtually any color, that won't fade
Adheres to virtually any surface

USES:

Inlaid into precious or non-precious metal, stone, glass, plastic, ceramic, enamel or U-NAMEL® **itself.**

Can be layered to make cabochons

Can be mixed with other **U-NAMEL®** projects to make intricate, interesting designs.

INSTRUCTIONS FOR PROFESSIONAL USE

Thoroughly clean the surface, by either sanding, sandblasting or using a tool. Scratch or roughen the surface for better adhesion. Surface can be degreased by using an electrolytic degreasing method or by thoroughly cleaning with alcohol. Be certain that the alcohol has thoroughly evaporated before applying **U-NAMEL®**.

For optimal adhesion, use **U-NAMEL®** BOND LIQUID. This product allows the **U-NAMEL®** to adhere more securely to metals and other surfaces. Apply after roughing the surface. This will make a permanent bond for **U-NAMEL®** Simply paint on the surface and cure with UV light for one minute.

Optionally, so that **U-NAMEL®** adheres to the surface better, it is advisable to sandblast the surface with 150-250 micron corundum at a pressure of 60-90psi (4-6 bar). Edge undercuts are the best method to keep **U-NAMEL®** in place. For large areas, it is best to drill anchor holes and allow **U-NAMEL®** to flow into them. **U-NAMEL®** must be used at room temperature.

CAUTION: Be certain to use the amber goggles(#lo425) when using the UV lamp. Severe eye damage could occur if you look directly into the UV lamp without the protective goggles.

U-NAMEL® is applied by slowly dripping the liquid into the application area. You can also use the optional micro brushes (#br405) to spread or design the liquid. Always be sure to clean all tools and brushes ESPECIALLY the tips of the bottles and optional dispenser needles with isopropyl alcohol after use.

Apply **U-NAMEL®** to the surface in thin layers (0.8mm for clear and light colors, 0.2mm for dark colors). Thick layers require longer UV curing times and may not cure thoroughly. To make a thick final product, you must cure in thin layers. Do not polish with alcohol if you plan to layer **U-NAMEL®.** After curing,

the top layer, clean the surface with isopropyl alcohol to remove the tackiness.

Place the item with the wet **U-NAMEL®** under the curing light for 1-5 minutes. It is always best to leave the item in the curing light as long as possible until it is thoroughly hardened. You MUST use fresh batteries. The best cure can be achieved by placing in direct sunlight for an extended period. Additional layers can be directly added to the cured first layer, to create special effects or to make cabochons. After curing, polish the surface with isopropyl alcohol to remove the tackiness.

Cured material can be removed by using **U-NAMEL®** BLASTER/REMOVER . Simply paint on to any **U-NAMEL®** surface.. Within 1 minute you will see the surface break up and ready for removal. U-NAMEL® can also be removed by grinding or burning at 570-725°f (300-380°c).

Metal surrounding **U-NAMEL®** can be electroplated without affecting the surface. Polishing can be achieved by grinding the cured surface and then polished.

Due to environmental conditions, **U-NAMEL®** may thicken in the bottle. If so, place the entire bottle in warm water to thin the material. It is best to store the bottles upside down so the liquid will easily flow through the tip .

STORAGE: It is best to store **U-NAMEL®** in a light protected environment at temperatures between 59-70°f (15-21°c). **U-NAMEL®** is provided in UV block containers to protect the unused material.

KEEP OUT OF REACH OF CHILDREN!!

2/21/22