Technical Data Sheet
Version. 4.01

OPV601UVA (OPV - UV Curable Analogue application)

Description

AT Inks, OPV601UVA, is a UV Curable Over Print Varnish (also called Coating or Overcoat by some) specially designed to provide better scratch/rub/scruff resistance, better light fastness, weather fastness & gloss to printed surfaces. This product was specifically designed for PVC extrusions surfaces after UV/LED Digital printing has been carried out to improve fastness properties and gloss. It was however found that if a good UV curable system is available with the End User, then OPV601UVA is ideal to be used in the following substrates even after printing with Solvent/Eco-Solvent or UV/LED digital Inks:

- Flex/ Banner
- Self Adhesive Vinyls
- Backlites
- Acrylic Sheets
- Polycarbonate
- Poly Styrene
- Glass
- Ceramic
- Metal
- Wood/MDF
- PVC Extrusions

Today's world is very demanding on printers. The End User wants the printed substrate to have bright Colors, good resolution, high strength, good gloss, good to excellent adhesion properties, good to excellent fastness to rubbing, light, weather, moisture and long outdoor life. It is not possible to cover all the aspects required by the end user by just printing, and, thus, AT Inks, has come out with a Over Coat that gives the printer an added protection to improve various fastness properties while not compromising the quality of the print, which can be cured instantly by exposing the over-coated surface after application with a UV Lamp.

With Flexible material such as Flex/Banner material, Self adhesive Vinyls, signage requires that the image printed on them, lasts for a long time when placed as a sign board. With OPV601UVA you can enhance the Outdoor life of the image by 6 months to upto 2 years (#).

OPV601UVA is a single component, UV light curable system, which can applied using a simple roller coater or by spraying and then exposing the surface to UV light in a UV chamber. It is ready to use, easy to apply and fast to cure, providing a clear transparent and glossy film on the final surface that is dry in seconds and resistant to the atmosphere.

Use of Product

To be applied on various substrates, to provide a protective layer on the substrate and excellent gloss.

Application Note

Spray coating is a convenient method to deposit liquid droplets onto substrates. OPV601UVA can be applied effectively onto substrates using spray coating method. Brushing or Roller coating can also be done, however, spray coating is according to us the most effective method for this product if done correctly. Application of this product will vary depending on the UV curing chamber design, the end user will use. A general method of use, is suggested below.

- Ensure the surface of the printed sample is clean and dry. Wipe with a dry cloth lightly to ensure any dust particles are removed off the surface. Please do not rub the surface as it may smudge or spoil the printed image.
- It is not recommended to dilute this product. Use as is without any dilution.

- Pour the mix into a spray gun connected to an Air compressor.
- Tune the spray gun by rotating the mouth which allows the fine mist spray with small droplets.
- Spray gently for forming a thin layer of coating smoothly on whole surface, keeping the spray nozzles at a reasonable distance from the surface to ensure no excess flow of overcoat is formed on the substrate surface.
- Spraying conditions like-distance from substrate, nozzle setting and applied pressure etc- should always be kept the same.
- Do not over-spray; the liquid should not flow down vertically as it may spoil the surface of the printing or the image.
- Do not wipe excess if any of the surface of the printed image.
- Allow the substrates to now pass thru the UV Curing Chamber. Type of Lamp and energy requirements can be called for by the User from us, per their requirement.
- Clean the spray nozzle with the Dilution solvent (DS1) provided to ensure the coating does not dry out in the spray nozzles and block them.
- It is a good practice to clean the nozzle with solvent after each spray coating is completed.
- After the substrate is exposed to required UV light it will be touch dry instantly and is ready to use.

Standard Product Packaging

Available in 10 Kg Dark Bottle. Larger packs are also available on requests. Dilution Solvent “DS1” needs to be ordered separately.

Shelf Life

6 months from date of manufacturing in unopened condition. The product should be kept in closed condition at all times once opened.

Storage Conditions

Product should be stored in original packaging in a cool/dry place between 10°C and 35°C (50-95°F) and relative humidity of 30 – 60% (non-condensating), away from direct sunlight and heat sources. Prevent freezing of this product.

Shipping and Handling

All personnel handling these products must wear gloves and eye protection as per local laws. After use, wash hands with soap and water. Should product come in contact with clothes, remove clothing to avoid prolonged skin exposure. Should product come in contact with skin, wipe off with a clean, dry absorbent cloth and wash area with soap and water. Dispose containers and product waste as per local and federal regulations. For additional safety data, please refer to SDS.

 # Conditions apply