#### **Technical Data Sheet**

Version, 4.01



# OPV501MP (OPV - 2K)

# **Description**

AT Inks, OPV501MP, is an Over Print Varnish (also called Coating or Overcoat by some) specially designed to provide better scratch/rub/scruff resistance, better light fastness, weather fastness or gloss to printed surfaces. These can be UV/LED Digitally printed surfaces or Solvent/Eco-Solvent surfaces printed on:

- 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 and 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.

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 OPV501MP you can enhance the Outdoor life of the image by 6 months to upto 5 years (#).

OPV501MP is a 2 Component System which when mixed together provides excellent fastness properties and exceptional gloss. It can be used after printing (allow the print to dry/cure for sometime before applying the coat) and applied onto a printed surface (wherein UV/LED Inks or Solvent Based or Eco-Solvent Based Inks have been used for printing the image) using Spray gun, brushing or roller coating.

It comes in two parts, i.e. Part A and Part B that will have to be mixed with each other in the recommended ratio of 4:1 i.e. 4 portions Part A and 1 portion Part B. Both of them need to be mixed well to form a single homogenous solution. This mixture will start hardening within 30 minutes and has to be used up within 45 minutes of mixing. After mixing the homogeneous solution may be applied to the substrate using spray coating (recommended for large surface areas) or brushing/Roller coating.

#### **Use of Product**

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

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#### **Application Note**

Spray coating is a convenient method to deposit liquid droplets onto substrates. OPV501MP 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.

- Fix the cleaned substrate vertically in a fume hood or in a well ventilated area. In case of flexible material, we recommend that the customer to frame the material before use on the frame it will be mounted.
- 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.
- Mix Part A and Part B in a mixing vessel while stirring the mixer to ensure a good, homogeneous solution is prepared.
- During the mixing take care not to use violent stirrings to avoid inclusion of air into the solution.
- We recommend that you take 4 portion of Part A and 1 portion of Part B. This is the ratio in which it has been packed and we recommend that once opened, the bottles should be fully consumed.
- If you need a smaller portion of the primer, then please use the ratio of 4:1 for Part A: Part B to ensure it is effective. Change in Ratio will reduce the adhesion of the primer and its outcome, thus, please take precaution to ensure that the ratio is right.
- Please ensure that after using if any Part A or Part B solution is remaining in the bottle, then
  you should cap it tightly as both the components are sensitive to moisture. The shelf life of
  the product will drastically reduce if left open for a longer period of time.
- Take the quantity as per your requirement but the ratio shall always be 4:1 (4 PART-A:1 PART-B)
- It is not recommended to dilute this product. Use as is without any dilution.
- Now 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.
- Please note that spraying on the substrate must be done, preferably within 10-15 minutes after mixing party A and part B. The pot life of the mix is about 30-45 minutes.
- 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 coating is
  formed on the substrate surface.
- Spraying conditions like-distance from substrate, nozzle setting, 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 print to air dry for a period of 2 hours. Check the drying and if dry, you can un-frame the flexible material and roll it loosely (if required).
- 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.

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#### **Standard Product Packaging**

Available in 1 Kg pack (800 g of Part A and 200 g of Part B), packed in a 8 Kgs carton box. 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. We do not guarantee the shelf life of the product, once the seal is broken.

#### **Storage Conditions**

Product should be stored in original packaging in a cool/dry place between  $10^{\circ}$ C and  $35^{\circ}$ C (50- $95^{\circ}$ 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

Disclaimer: The information provided in Technical Data Sheet (TDS) is based on AT Inks' internal laboratory testing data. Rex-Tone industries Ltd, AT Inks, their distributors and assigns shall not be liable to any loss or damage, including such loss or damage to any third party, caused by any use of the Products which is inappropriate or not in accordance with instruction for the storage and use of the products in this TDS or in a replacing or supplementary TDS issued by AT Inks. In any event AT Inks' liability is limited to a maximum of the price of the Product(s) or the cost of replacing such Products only. AT Inks is not, in any event, liable to any other loss or damage, including consequential damages.

All technical instructions about our products and their use, if spoken, written or through test trials are to the best of our knowledge. However, it should not be considered as an assurance for certain properties of products or their suitability for each application. It will be solely your responsibility for the selection and testing of the ink for specific applications.

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