



Thank you for your purchase. We hope that you will enjoy the many benefits to DTG printing that Image Armor can offer:

1. Wider application window – no more wash outs due to too much pre-treatment
2. More vibrant colours
3. Reduced crystallization
4. Increased washability

In the attached pages we have outlined usage directions. **As a general guide, you will need to apply approximately 25-30% more Image Armor pretreatment as you typically would with DuPont pretreatment for white ink.** As with any new variable in your DTG process, testing is recommended. Start with more pretreat than you think necessary, then dial it back gradually until you find the optimal quantity of pretreatment for maximum print quality.

Please do not hesitate to contact us should you have any questions or concerns.



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# HOW TO USE IMAGE ARMOR PRETREATMENT

Image Armor Dark Shirt Formula is best suited for dark shirts like black, navy, etc. Use of Image Armor Dark Shirt Formula can in some instances react with chemicals and residuals in light colored shirts resulting in discoloration.

Image Armor Ultra Formula is suited for Brother® and Epson® printers / ink-sets or where DuPont® ink-sets are used for One-Pass or In-Line printing – anywhere where faster printing speeds require a “hotter” pretreatment to gel the white ink more quickly prior to printing the CMYK layer.

Please use our Image Armor Light Shirt Formula for light colored and white shirts. Always test prior to running any production.

## Before Use:

- Image Armor Concentrate should be diluted with distilled water in a ratio of 1 part Image Armor to 3 parts distilled water before use. 1 litre of Image Armor concentrate makes 4 litres of ready-to-use Image Armor solution. DO NOT use tap water to dilute the concentrate, as the impurities in tap water may cause discolouration of the pre-treated garment.
- Image Armor Solution is ready to use (RTU) right out of the container.
- Always SHAKE the concentrate container before diluting
- Always SHAKE the container before using or pouring into your pre-treatment machine container.
- When returning unused pretreatment from a machine, strain it to ensure no fibers or dirt, dust, contaminants are in the solution. A clean solution keeps you happy.

## Application:

- When applying pre-treatment to the garment, make sure to apply it as evenly as possible (mechanical pre-treatment machines are the best).
- Depending on the shirt being pre-treated there are some variables to consider on how much to apply.
  - A good starting point is 15-18 grams per 14"x14" area.
    - **NOTE: 18-26 grams may provide you with better washability and white optical brightness. This is opposite of what other manufacturers recommend. Test to find your best laydown for the garment you are pre-treating.**
  - The heavier the garment, the higher the amount of pre-treatment needed.
  - The darker the colour, the more pre-treatment is required.
  - The lighter the weight of the shirt, you can usually reduce the amount of fluid applied to the garment.
  - The lighter the colour of the shirt, less pre-treatment is usually required.
- Always use a high quality garment that is ring-spun with a tight knit weave. The smoother and tighter the weave, the better your final DTG print.

## Curing:

- Set your heat press to 165°C (330F)
- Cure time: 30 seconds. If after 30 seconds there is still moisture on the shirt, re-press in 10 second intervals to ensure garment is completely dry. Alternatively, you might try two x 20 second presses
- Pressure setting: You don't need a lot of pressure. Use light to medium pressure to start. Heavier pressure can be used and will help press/mat down fibres during the drying process.
- It is suggested to utilize parchment paper or a teflon sheet when pressing the pre-treatment dry. (Teflon sheets may result in a glossy sheen to the garment, (silicone-coated) parchment paper, gives more of a smooth matte finish).
- Covering should be easily removed and not stick to the shirt when peeling. Sticking will result in fibres sticking up resulting in non-smooth white prints. DO NOT allow cover sheet to remain on garment after pressing or crystallization can occur as pretreatment vapours cool.

## Storage of Garments:

- Pre- pre-treated shirts can be done ahead of time. Try to use them as soon as possible. It is not recommended to go more than two weeks after pre-treating before using.
- Always re-press the garment for 5-10 seconds with light pressure if they've been stored for more than a day. The shirts will collect moisture, and moisture is the enemy of good pretreated shirts. **ALWAYS MAKE SURE YOUR SHIRTS ARE MOISTURE FREE BEFORE PRINTING.**
- DO NOT OVERHANDLE the shirts. Touching, bending, folding, throwing shirts around will damage and break the pre-treatment down on the shirt. For the best results, try not to "man handle" the garments prior to printing.

## Storage of Pre-treatment:

- Pre-treatment should be stored in a cool, dry place, out of direct sunlight. 10~28°C is recommended.
- In addition to shaking the pre-treatment well before diluting (if working with concentrate) and before each use, shake any unopened bottles regularly – at least once per week.

