

## **Technical Notes**

## **Ink Wash Resistance**

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**Applicable Models:** AnaJet SPRINT printer series

**Background**: Several factors can influence how resistant ink is to washing and wear. In general, the rule is that more ink saturation will give allow the ink to hold up longer to washing. As with all garments, the ink will naturally fade over time. This can be most significant after the first wash. It is recommended that garments be washed inside-out to protect the print.

**Discussion**: The following are several reasons why prints could wash out prematurely:

- The ink is not being cured properly AnaJet ink is specifically formulated for textiles. This ink must be set with heat. The heat allows the ink to polymerize (create long chain molecules) which gives it the resistance to washing. If the ink is not cured hot enough or long enough, the ink fails to polymerize and washes out much sooner. It is a good idea to check the heat press with a remote infrared thermometer to verify it is achieving the correct temperature. Often the internal thermometers on heat presses are inaccurate.
  - Note: AnaJet recommends a medium to heavy pressure on the heat press. However, the pressure is not as important at achieving the correct temperature.
- <u>Too much pretreatment has been applied</u> When too much pretreatment is applied to a garment, the ink may crack or peel. The pretreatment acts a barrier between the ink and garment. If an excessive amount is used, the ink will not bond properly to the garment.
- The garment has been treated for stain resistance Occasionally garments will come with stain resistant material embedded in the fabric. This will prevent the ink from bonding with the fabric and cause premature ink degradation. This is often found items such as aprons.
- <u>Too little ink applied to the garment</u> Be aware that the ink will lighten slightly after pressing.
  Be sure to apply enough ink so the wet image is slightly darker than the final heat cured product should be. This will allow for the lightening of the garment due to the heat press.