IMAGE ARMOR

DTF

Date: 01/01/24
Version: 2.0

DTF300

Direct-to-Film Pigment Ink

Technical Data Sheet

Product Description: A water-based inkjet ink for Direct-to-Film printing. Compatible with printheads requiring low viscosity inks.

Usage Conditions: An environment where the relative humidity is between 40% and 80% (non-condensing) and the ambient temperature is between 15°C and 30°C (59°F – 86°F). **MIX UNTIL HOMOGENEOUS BEFORE USE**.

Powdering Conditions: After printing on the DTF film, apply the powdered thermoplastic polyurethane (TPU) glue immediately and melt at 280-320°F.

Transferring Conditions: Place the film powdered side in contact with the substrate. Using a heat press set to 280-320°F, hover over the film for 60-120 seconds. Then use low-high pressure for 30-60 seconds to transfer the print to the substrate. Let the DTF film cool down before you gently peel it off.

Shelf Life and Storage: Two years from date of manufacture if stored in sealed containers between 5°C and 35°C (41°F - 95°F). PROTECT FROM FREEZING.

Ink Color and Product number

	Cyan	DTF300C
	Magenta	DTF300M
	Yellow	DTF300Y
	Black	DTF300K
	White	DTF300W

Specifications for Colors:

- Viscosity: 3 – 5 mPa.s *(determined by A&D SV-10A Vibro Viscometer @22°C)*
- pH: 8.0 – 9.2
- Density: 1.02 – 1.09 g/ml
- Dynamic Surface Tension: 30 - 40 mN/m *(determined by Bubble Pressure Tensiometer @ 20ms)*
- Static Surface Tension: 26- 32 mN/m *(determined by Bubble Pressure Tensiometer @ 1400ms)*

Specification for White:

- Viscosity: 3.5 – 6 mPa.s *(determined by A&D SV-10A Vibro Viscometer @22°C)*
- pH: 8.0 – 9.2
- Density: 1.10 – 1.20 g/ml
- Dynamic Surface Tension: 40 - 50 mN/m *(determined by Bubble Pressure Tensiometer @ 20ms)*
- Static Surface Tension: 26- 34 mN/m *(determined by Bubble Pressure Tensiometer @ 1400ms)*

Note: The instructions given are a starting point for testing. It is the user's responsibility to optimize the system for their specific needs.