D A T E S H E E T

DTF POWDER T2-121

1.Information

Description	DTF Powder T2-121
Type	Hot Melt TPU Powder
Appearance	Particles
Particle sizes	Fine powder
Melting Range	115-125℃ (Typical)
	110-120℃ (DSC)
Application	Fine-textured fabric (cotton, polyester, etc.)
Storage	In a cool and well-ventilated place.

2.Component

Component	
Thermoplastic Polyurethane (TPU)	100%

3.Application

- Heat transfer printing: swimsuit printing, hot stamping, flocking ink, printing ink, transfer printing, etc.
- High-grade interlining: woven and non-woven interlining, shoes lining, shoulder lining, cap lining, etc.
- Filter materials.
- Automobile trims.
- Powder coating.

- Other industries.

4.Advantages

- High viscosity strength, pattern and fabric bond firmly, strength the pattern color to retain the brightness.
- Strong flexibility, no cracking.
- Soft and certain resilience, excellent workability.

5.Process

5.1 Pre-processed pattern by Photoshop or others, then input into software of printer.

5.2 The printer needs to achieve the best match with the corresponding consumables such as PET film, ink, and ICC color management software to ensure that the printed pattern has stable and vibrant colors.

Printing humidity: 40%-70%.
Indoor temperature: 20-30℃.
Heating plate at the back of printer should be kept heated to a temperature of 38-45℃.

5.3 Let the printed film with the pattern flow into the shaker.

In winter, front and back heating of the printer can be turned on to ensure stable quality
with recommended temperature of 40-45℃.
The front heating of the shaker is also recommended to be heated to 40-50℃.

5.5 When shaking,

Shaking speed should match the printing speed.
And the temperature is best from warm to hot slowly progressive, control in the film surface temperature between 70-90 ℃.

5.6 After baking, finished rewinding for the finished film with pattern, should be stamped as soon as possible through the stamping machine stamping on the surface of the substrate clothing and other materials.

The temp for heat pressing is usually set at 150-160℃.
The heat pressing time is around 8-10 seconds.
The heat pressing pressure is between 4-6KG.
It is best to match the specific fabrics accordingly.

Note: all fabrics should be at least 110 ° C high temperature resistance. Above parameters are just for reference, please make multiple tests on different fabrics.

6.Classification and Notice of powder

80micron fine powder	Washed labels for fine text can be matched to fine powder
120micron medium powder	General patterns are recommended to use medium powder
200micron coarse powder	Large patterns are recommended to use coarse powder

Powder should be sealed and stored, so as not to dampen the effect of shaking.

- Due to the different printers, inks, boards ICC curve of each user and the difference of substrate fabrics, you can make a perfect PET film according to own actual situation.
- If film surface is exposed for a long time to absorb moisture or dust should be ripped off the exposed section before printing, so as not to affect the judgment of the choice of powder.

- Hold the film rolls gently, avoid pressure and bruises, cut the winding film and pay attention to the strength and angle of the knife to avoid deep scratches.

7.Troubleshooting

Problem	**Some of the hot melt powder cannot be shaken off**
Reason	Humid weather, high humidity, high static electricity. If the edges of the pattern cannot be shaken off, please check: 1.Whether the environmental humidity is too high or the temperature is low. 2.Is the shaker not strong enough. 3.Whether the drying glycerin spreads because the powder is not sprinkled for too long after printing. 4.Whether there is any ink spilled from the printhead.
Solution	1.If it is found that the pressure wheel bit shakes not clean

	or blank large area shake not clean, it should be the effect of static electricity or glue powder moisture or too fine, depending on the situation to take measures. 2.It is recommended to increase the temperature of the rear heating plate and the heating plate of the oven machine's receiving position.

Problem	**Baking Powder Perforation**
Reason	High temperature baking for a short period of time causes the water and glycerin in the ink to boil and evaporate violently, which opens the pores of the coating and film.
Solution	1.It is best to medium powder and fine powder, coarse powder mixed with a small amount or even do not add, if the baking powder machine is excellent, can be divided into low-temperature section and high-temperature section of the baking, so that the best results. It can step by step both thoroughly vaporize the oil and water to melt

	the glue without violent reaction. The baked film is flexible, elastic, smooth and dry. 2.If the baking machine is a little poor, to make good use of the function of the preheating plate in advance to heat, steam off some water to reduce the burden, first baked dry before shaking powder.

Problem	**Return of oil or moisture**
Reason	Oil or water flooding around the baked pattern or transferred pattern.
Solution	1.This is the phenomenon that the glue is not baked thoroughly when baking, and the water and glycerin in the ink cannot be thoroughly baked dry and back seep out. 2.Generally, it is best to bake the single operating plate at a low temperature of about 120 degrees for a long time. Machine baking powder is limited by the length of the baking machine, you can bake powder machine in front of

	the receiving plate to increase the temperature appropriately, so that the water and glycerin evaporate in advance will also help.

Problem	**Stamping off powder**
Reason	Sticky coating on the blank space around the pattern after transfer.
Solution	This phenomenon is due to stamping pressure is too high so that the film on the ink-absorbing layer damage peeling or fabric surface paste easy to stick coating caused. Generally as long as the temperature, pressing time to meet the requirements of the paste firmly, the pressure as far as possible downward adjustment, can be easily solved.