



DTF Printing One-stop solution

DTF printing is short for Direct-to-Film, is exactly as the name suggests. Designs are printed onto a film using a specialist printer. Then the prints are directly transferred onto the garment via a heat press. DTF provides a high degree of accuracy with an exact replication of the original design on a wide variety of fabric types. Most print methods are limited to a range of similar fabrics, like cotton and cotton-blended materials. With a DTF print, you can work with tougher fabric varieties like polyester, fleece, nylon, and of course, classic cotton.

Leading Chem supply a DTF printing one-stop solution for customers, we are supplying **DTF Powder, DTF PET Film and DTF coating materials.**



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DTF powder,also called hot metal powder which is an important and necessary material that will be needed during DTF printing. Leading Chem is strong in supplying 100% TPU powder, due to its clean ingredients, no impurities added, better tensile resistance, clean powder shaking, non stick powder, refreshing hot stamping image, clear small text lines without ghosting, scratch resistance, and resistance to yellowing.We have a comprehensive DTF TPU powder series to satisfy different fabric,temperature and pliability.

Specifications of DTF Powder

Specifications		LD100	LD200	LD300
Melting point		120℃	120℃	120℃
Melt Flow Rate		30	30	30
Particle size		80um~180um	120um-250um	60um-120um
Pressing Conditions	Time	6-12 seconds	8-12 seconds	8-12 seconds
	Temperature	150℃~160℃	145℃-160℃	150℃-160℃
	Pressure	6kg	6kg	6kg
Washing Fastness	Water washing at 40℃	4	4	4
	Water washing at 60℃	3	3	3
	Dry cleaning	4	4	4
Feature		<ul style="list-style-type: none"> ● High elasticity ● Quick tearing ● Suitable for general fabric including silicone oil fabric 	<ul style="list-style-type: none"> ● Non stick powder ● High fastness for water washing and dry cleaning ● Strong tensile strength ● Suitable for Hoodies, knitted coarse fabric 	<ul style="list-style-type: none"> ● Super soft touch ● Strong rebound ● Special customized for pinstripe,for example swimsuit

DTF Film Specification

DTF Film	Available size	Advantages	Available Peel way
Single-Layer	0.3m*100m/roll 0.6m*100m/roll	Good Ink absorption Easy to Peel High temperature resistance Anti static	√ Cold Peel √ Hot Peel √ Cold&Hot 2 in 1 Peel √ All Time Peel
Two-Layers			

LD-2301 (3-in-1) : The 3rd Generation DTF Coating Material

LD-2301 is a cationic polymer with three major functions: ink absorption, release, and static elimination.

It is mainly used in the digital white ink transfer printing industry and is suitable for base materials such as PET film/high-density paper (with waterproof treatment). Multiple equipment processes such as screen rollers, micro-concave, and intaglio can be selected.

The transfer film produced with this coating has excellent ink absorption (fixing), vivid colors, and a dry and clean surface. After transfer, the coating will remain on the base film and will not be transferred to the pattern surface, thus avoiding the disadvantages of affecting the pattern's texture and elasticity (which is the biggest difference from traditional methods that require a release base). The release performance can achieve various operation requirements such as instant tearing, hot tearing, warm tearing, and cold tearing.

Superiority:

- 3-in-1, one process completes ink absorption, release, and static elimination, greatly improving production capacity and yield rate while significantly reducing production costs.
- After transfer printing, the coating will remain on the film and will not be transferred to the pattern surface, thus avoiding the disadvantages of affecting the pattern's tactility and elasticity (which is the biggest difference from traditional methods that require a release base). Under the same conditions, the pattern printed after transfer printing will be 30-50% softer than traditional film, with a higher color saturation close to that of screen printing with special inks.
- When the dry coating amount reaches 4-5 grams per square meter, 100% ink volume can be printed freely without aggregating or flowing ink; the printed pattern does not reverse oil and has no water edge.

Use:

- Equipment selection: The fewer guide rollers the film reel passes through, the better, to avoid coating scratches and peel.
- Screen selection: Micro-concave coating process, 140~160 mesh herringbone-patterned ceramic roller

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(coated 1 time); screen printing process, honeycomb-patterned 250~280 mesh ceramic roller (coated 2 times). Ceramic scraper.

3. Drying temperature: Parabolic temperature adjustment, with one temperature zone of 140-150°C in the middle, and no other temperature zones exceeding 130°C (the unsealing temperature of the coating resin is 128°C, and if the baking temperature is insufficient, the resin will not be completely unsealed, resulting in insufficient adhesion between the coating and the base film; excessive baking temperature and prolonged time will lead to a decrease in ink absorption).
4. Vehicle speed: For equipment with an oven length of 28 meters or more, the process of applying two coats in the same direction is 60-70 meters per minute, and the process of applying one coat in reverse with micro-concave is 40-45 meters per minute.
5. The optimal sizing amount is: 10~12 grams/square meter (the ink absorption will decrease when it is below 4 grams/square meter).
6. Before use, stir slowly for 2-3 minutes (settling may occur after long-term storage, but stirring does not affect use).
7. During mass production, clean the hopper every 7-8 hours and store the remaining material separately in a barrel with a 150-mesh filter. Mix the old material with four times the amount of new material in a ratio of 1:4 and stir well for use.
8. Adjust the viscosity with 15% or less pure water, and the product quality produced with the original liquid is the best.

Technical data:

Product name:	Coating material (3-in-1)
Model:	CS -1401
Appearance :	Creamy-white, viscous liquid
Solid content:	40±3%
dynamic viscosity:	10-15 seconds at temperature 25°C with NO.4 coating cup
pH:	5~6
Substances type:	Water-soluble cationic polymer
Package:	20/50/125KG/drum
Storage condition:	Store below 18°C.
Shelf life:	180 Days
Environmental protection:	Conform to EU textile environmental standards.

Attention:

This product has a weak acidity, so the equipment oven **must be made of stainless steel material** to avoid any potential minor corrosion to the equipment.