

TECHNICAL DATA SHEET

LNT Solvent Soluble Toners

LNT Solvent Soluble Toners are high strength, good transparent, high adhesive pigments which are soluble in various solvents for flexo and gravure applications on packaging, plastic films, papers and foils. They are compatible with many binders, such as alcohol soluble with nitrocellulose, polyamide, polyurethane to form fluorescent inks.

Applications:

- Solvent based:
- Gravure
- Flexo inks
- Paints
- Industrial inkjet inks

LNT soluble toners are transparent and should be printed on white stock or over a white ink to achieve the maximum fluorescent brightness.

Available Colors:

LNT-10	Lemon yellow
LNT-11	Pink
LNT-13	Red
LNT-14	Red orange
LNT-15	Orange
LNT-16	Orange yellow



LNT-17	Yellow
LNT-18	Green
LNT-19	Blue
LNT-20	Violet
LNT-21	Magenta

Physical & Chemical Properties:

Appearance	Colored Granular Powder
Specific Gravity	1.36
Softening Point	>80°C

General Solubility: some esters, ketone, glycols, glycol ethers and alcohol/ester. Insoluble in water, aliphatic or aromatic hydrocarbons.

Lightfastness:

Inks made from LNT Soluble Toners are intended for indoor uses only. They are not recommended for window use or outdoor exposure. Different modifying resins will have varying effects on the lightfastness of the finished product. Suitable tests should be conducted.

Heatstability:

LNT series can be used for short dwell times in applications with processing temperatures up to 170°C without affecting the colouristic properties. The dwell time should be kept short to avoid hue variations.

Storage:

LNT fluorescent pigments are delivered in cartons with PE lining, net weight 10kg. It should be kept in cool place and away from heat. All opened bags should be carefully resealed immediately after use.

Due to the low softening point of LNT toners, it is suggested to be stored in cool and dry place.

Toxicity:

LNT fluorescent pigments are essentially non-toxic and non-hazardous with extremely low heavy-metal content. (Material) safety data sheet (M)SDS is available upon request.

RECOMMENDED FORMULA

STEP 1---Soluate LNT pigment to make LNT solution (taking 100g LNT for example)

*A	Anhydrous ethyl alcohol	-----20g
*B	Ethyl acetate	-----30g
*C	MEK	-----10g
*D	LNT Series toner	-----40g
*A+*B+*C+*D		100g LNT solution.

Remarks:

- 1.First mix anhydrous ethyl alcohol, ethyl acetate and MEK together. Then use high-speed mixer to stir the solution, while slowly add in some LNT powder to make transparent solution;
- 2.Or use toluene or xylol instead of the solution of anhydrous ethyl alcohol and ethyl acetate, but can not mix of these two combination with each other.

STEP 2 Make LNT solution to transparent ink (gravure or flexo)

*A	Anhydrous ethyl alcohol	-----10g
*B	Ethyl acetate	----- 18g
*C	Binder	----- 20g
*D	LNT toner solution in STEP 1	-----50g
*E	Plasticizers	-----1g
*F	PE-wax	-----1g

Total---100g

Remarks:

- 1.First mix anhydrous ethyl alcohol, ethyl acetate, binder, PE wax to make solution. Then put LNT toner solution to the mixture solution.
- 2.If use toluene or xylol instead of the mixture solution of anhydrous ethyl alcohol and ethyl acetate in the STEP 1, then should also use toluene or xylol instead of the mixture solution of anhydrous ethyl alcohol and ethyl acetate in STEP 2.
- 3.Tests are necessary before use of binders. Choose binders that are compatible with toluene, xylol, anhydrous ethyl alcohol and ethyl acetate.