



Peelmaster Packaging Corporation
6153C West Mulford St.
Niles, IL 60714

(847) 966-6161
spectrumplastics.com

Guidelines for Medical Packaging Graphic Design

- Background
- Print in the heat seal area – Avoid if possible
- Close registration and “traps” – Discouraged, but possible
- Screens and halftones – Recommended screen: 80 line; gradients/vignettes discouraged
- Small type – 6 pt. or larger recommended
- Color specifications – Use Pantone uncoated for paper, Tyvek[®]; Pantone coated for films
- Large solids – Large solid area of print are discouraged
- Metallic Inks – Discouraged, and may incur extra expense
- Electronic artwork – Vector based format (see page 2 for further details)

Background:

Because medical packaging materials (particularly Tyvek[®]) can be of uneven thicknesses, there are some limitations on printing that graphic designers should take into consideration when designing artwork for medical packaging.

Spectrum Plastics Group is one of the best printers in the medical packaging business, and can provide expert assistance in your design process. No matter what the challenge, we will give our best efforts. However, often it is possible to reduce or eliminate potential problems with proper design in the first place. For this reason, to assist you, we have assembled the following guidelines:

1. Spectrum Plastics Group uses a web-fed (roll-to-roll) flexographic printing process.
2. We can print up to 4 colors in register on one side of the web, or can print in register on both sides, 2 colors on one side, one color on the other. (Note: Most medical packaging is one or two colors. If more colors are needed, up to 4 colors can be printed on each side of the web—in two print passes—but the image on one side will randomly located on the package.)
3. Other print configurations are possible. Contact us for more information.

Print in the heat seal area:

1. Print copy (including solids or graphics) in the seal area is highly discouraged, as ink can “pick off” during sealing and build up on the sealing surfaces. The seal area includes the area where Spectrum Plastics Group’s customer will seal closed the pouch after filling with product.
2. Print copy specified in the seal area cannot be guaranteed against picking off during processing, and will be processed on a “best efforts” basis.
3. Seal locations and configuration are typically specified by the purchaser, but are often 3/8” wide. An extra 1/8” clearance between seal area and print copy is recommended.
4. If you need assistance determining the location of the seals, contact Spectrum Plastics Group.

Close registration and “traps”:

1. Close registration (adjoining colors) are possible but discouraged.
2. For close registration, plan for traps (ink overlap) of at least 1/32” (.030”), preferably 1/16” (.060”).
3. Fine type typically should overprint rather than trap.

Screens and halftones:

1. Due to the natural variation of Tyvek® gauge (thickness), a relatively coarse screen is recommended for screens and halftones. 80-85 line screens are recommended. Screens finer than 100 lines per inch cannot be guaranteed against filling in, and will be printed on a “best-efforts” basis.
2. Gradients (e.g. vignettes) and blended screens are not recommended.

Small type:

- Due to the unevenness of Tyvek®, very small type (smaller than 6pt) is liable to fill in on occasion. Type smaller than 6 point cannot be guaranteed against filling in, and will be printed on a “best-efforts” basis.

Color specifications:

- Colors are best specified in the Pantone Matching System (PMS), by PMS number. Colors printing on Tyvek® or paper should be specified as uncoated (“U” suffix), while colors printing on polyester and other high-gloss films should be specified as coated (“C” suffix).

Large solids:

1. Due to the gauge variation of medical packaging materials, large solid print areas and areas of reverse type (white on colored background) can sometimes show variations in print density, highlighting the “grain” or structure of the underlying material. This effect is unpredictable and an accepted feature of such printing. Large solids are also more subject to ink pickoff during subsequent processing (heat sealing, etc.) When unavoidable, large solid areas can be printed successfully, but the careful designer will take these considerations into account before incorporating them into a design.

Metallic inks:

1. Metallic inks (golds, silvers, coppers, etc.) are not generally recommended for printing on Tyvek®, although generally good results can be obtained with careful application. Metallic inks often entail extra costs to purchase, and can “spoil,” thereby raising the printing costs of packages designed with metallic inks in the print copy.

Electronic artwork:

1. Final artwork must be submitted as a vector based format using any of the following object-based editing software: AI (Adobe Illustrator-*preferred*), CDR (Corel Draw), CGM (Computer Graphics Metafile, or DXF (Auto Cad & other Cad Software).
2. Please also include a PDF (Adobe Acrobat) file, to show the final artwork configuration.
3. **Helpful Option:** Include “Press Quality with Trim Marks” pdf formats of full composite, AND color separated files for each PMS color, with PMS number stated in file name.