# Printing on Plastic DESIGN TIPS AND GRAPHICAL SOLUTIONS





PLASTIPAK INDUSTRIES INC.

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## TECHNICAL SPECS AND RECOMMENDATIONS



This guide explains design constraints related to printing on plastic and provides solutions to will maximize print quality and print consistency.

Plastipak recommends sending a PDF proof to their prepress department for printability review prior to final design approval. For further information please contact your Customer Service Representative

at: 1.800.387.7452

#### **FILE PREPARATION AND SOFTWARE**

Plastipak recommends using the following software and would ask that you please prepare your files according to the specifications below.

#### Adobe Photoshop CS

- Images resolution: 300 dpi
- Retain layers if any
- · Do not place text
- · Text should be created in Illustrator

#### Adobe Illustrator CS

- Do not outline fonts
- Provide fonts needed to open document
- Provide colour output with Pantone identification numbers
- Include all placed images (linked or not)

In some cases other software files are acceptable if saved in EPS format. A preliminary test may be required prior to sending final artwork.

#### **FILE DELIVERY**

Final artwork can be uploaded on to our FTP site. To obtain access our FTP site, please contact your Customer Service Representative for a user name and password.

Files can also be sent to us on a CD/DVD. When sending the CD/DVD to our Customer Service Department, please include a printout of the content.

#### MAXIMUM PRINTING DIMENSIONS (DIELINE)

Plastipak's EPS and PDF dieline files are available from your Customer Service Representative.

#### DOT GAIN, LINE SCREEN AND TRAPPING

- Dot gain is approximately 25% printed. Therefore available gray scale is between 25% and 75%
- Line screen is 100 lpi
- Plastipak will take care of the overprint and trapping so please do not use these options in your files

#### **TYPE**

- Always use solid (100%) colour
- A maximum of two overprinting colours is allowed for type
- Positive type size: minimum 6 pts (medium type).
- Reverse type size: minimum 8 pts (bold type)

#### COLOUR

Plastipak will convert process images into Pantone for print maximization and print consistency. Please retain a minimum of 4 colours to print illustrations. Your Customer Service Representative will be able to provide you with the number of colours available for your chosen container and lid.

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#### **CUSTOMER APPROVAL**

PDF proofs of the artwork will be sent to the customer approval. (Hardcopy proofs are available upon request.) This proof will need to be signed and returned to **artworkapproval@plastipak.ca** prior to film and plate preparation.

This section explains UPC code limitations when printing on plastic. You can help UPC code scanning by following instructions below.

#### **UPC CODE**

- · The ideal position is indicated on dieline for both containers and lids
- Orientation must be horizontal on container
- No truncation
- Leave a white area of 1/8" (3.2mm) all around the UPC code

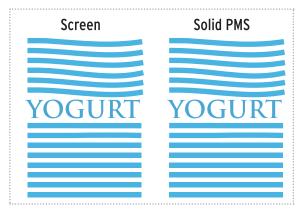
Decodability of a UPC is guaranteed only if its size is equivalent to 110% and as long as it is printed in black on a white substrate. When cup dimension can't allow it, please choose UPC code to full height of container dieline. If black isn't available in you artwork design, some Pantone colours can be use instead. Please note that a coloured UPC may have a decodability problem. Black should always be your first choice.

Please find below the list of Pantone colours which can be used for UPC codes:

PROCESS CYAN PROCESS BLACK REFLEX BLUE PROCESS BLUE PANTONE GREEN PANTONE BLACK 072 1545 261 262 266 267 268 269 273 274 275 276 2738 2747 2748 2757 2758 2767 2758	285 286 287 288 289 293 294 295 296 299 2935 2945 2955 2965 300 301 302 303 307 308 309 3005 3015 3025 3035 313	3135 3155 3165 320 321 322 323 327 328 329 3272 3282 3285 3288 3292 3295 3298 330 334 335 336 3302 3305 3308 340 341	348 349 3435 350 354 355 356 357 364 412 419 426 432 433 439 440 445 446 447 4625 497 4975 504 5185 525 532	540 541 546 547 548 5463 5467 5473 553 554 555 560 561 562 567 568 569 5605 574 5747 627 634 7449 7547
				7547
280	314	342	533	
281	315	343	539	
282	316	347	5395	

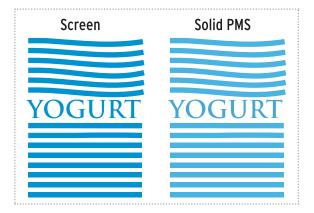
# PRINTING ISSUES ON PLASTIC AND HOW TO AVOID THEM

#### **ORIGINAL ARTWORK**



Choose a solid light Pantone colour instead of a darker screened colour

#### **PRESS RESULT**



Screen gained 25% on press but solid colour remained the same

Blurry screened black drop shadow

**SHADOW** 

Solid PMS sharp drop shadow

**SHADOW** 

Create drop shadows using light solid colour without blurry effect.

Blurry screened black drop shadow



Solid PMS sharp drop shadow

SHADOW

Blurry effect is almost void and gained 25%. Light solid drop shadow remains unchanged.

Text with 3 process colours

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

Text coloured with a single PMS

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

Please replace process text by a solid PMS colour.



Text with 3 process colours

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or ke salt, who sodium soya le citrie and the sarotene

Text coloured with a single PMS

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

Process colour text will vary with dot gain and registration is unstable.

## PRINTING ISSUES ON PLASTIC AND HOW TO AVOID THEM

#### ORIGINAL ARTWORK

## Regular reverse type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial

flavour, beta-carotene.

## Bold reverse type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

Please choose a bold font for reverse type.

#### **PRESS RESULT**

## Regular reverse type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

### Bold reverse type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, sodium benzoate, soya lecithin, color, citric acid, artificial flavour, beta-carotene.

Regular type fill results in poor legibility. Bold type looks like regular type.

#### Too small or too condensed type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, color, citric acid, artificial flavour, beta-carotene.

CONTAIN:
MILK INGREDIENTS.
MAY CONTAIN
TRACES OF NUTS.

**}**}

#### Too small or too condensed type

Ingredients: Liquid and hydrogenated canola oil, water, palm oil and/or kernel oil, salt, whey powder, color, citric acid, artificial flavour, beta-carotene.

CONTAIN:
MILK INGREDIENTS.
MAY CONTAIN
TRACES OF NUTS.

Please use type as big as possible on lower part of container.

There is a slur effect on lower part of container. Legibility can be affected.

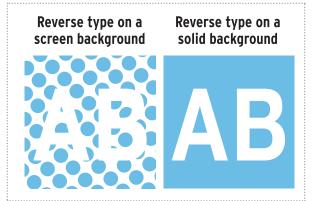
Reverse type on a screen background

Reverse type on a solid background



Do not place reverse type on a screened background. Choose solid background instead.

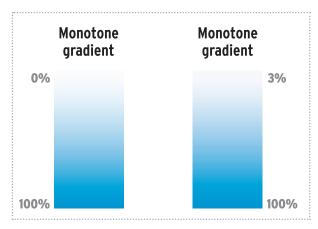




Type is not easily read on a screened background.

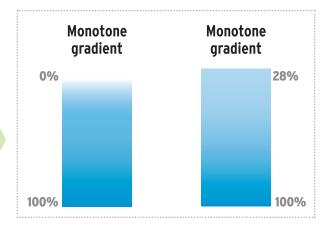
# PRINTING ISSUES ON PLASTIC AND HOW TO AVOID THEM

#### **ORIGINAL ARTWORK**

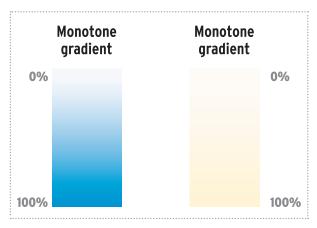


Minimum dot requirement for a gradient is 3%.

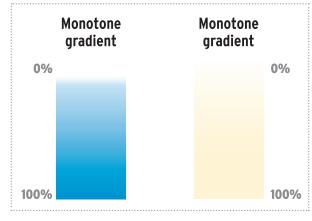
#### **PRESS RESULT**



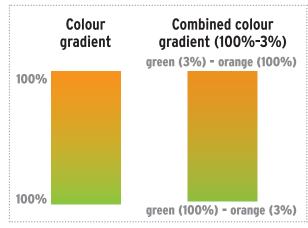
Gradients lighter then 3% will break to 0%. For a smooth gradient, don't go lower than 3%.



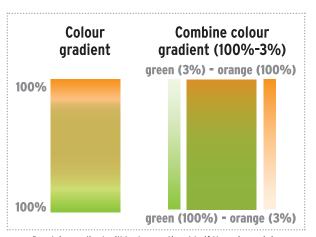
If you absolutely need to create a 0% gradient, please use a light Pantone colour.



Break in gradient will be less noticeable if a light colour is used.



For a smooth colour gradient, two separate gradients are overprinted instead of combining the colours in one path



Break in gradient will be less noticeable if there is a minimum of 3% overprints at each end of gradient.