

PDF type and version

- Preferred file format is PDF, ideally an PDF/X-4 or 1A.
PDF version should not be higher than 1.6.
- Other formats or file types (layered or native files) will increase the graphic processing costs **significantly**.
Please contact our customer service for more details.

File submission:

- Please send one file for each product (e.g. separate files for a pac, o-card, disc) and delete any unwanted files from your file folder.
- If you have used a template number, please add this number to the file name.

Tolerance / Bleed / Marks

- Files should have at least 3 mm bleed.
- Trim marks or any other print/color information must be outside the print area.

Images

- Colour mode must be CMYK for 4c images, Grayscale for black and white images, or Bitmap for line art.

Resolution

- Colour and grayscale images – minimum 300 dpi
- Bitmap /Lineart images – minimum 1200 dpi

Line widths / font sizes

- The minimum line weight should not be under 0.09 mm in positive use, 0.2 mm in negative use.
- Fonts should not be smaller than 4 pt for positive texts and 6pt for negative texts.
- Please consider the line weight restrictions above for thinner font weights!

Barcodes

- Barcodes must be in a vector format and defined as 100% Black.
- A white background C0/M0/Y0/K0 is strongly recommended.
- Other (spot) colors may affect the legibility of the code.
Colours consisting of Cyan and Black should never be used for a background underneath a barcode.

Colours

- Your PDF should contain only process colors - Cyan, Magenta, Yellow and Black plus All (registration color).
- Spot colors should be clearly named, e.g. as Pantone [Number], or UV Gloss Varnish etc.
Please avoid to use any special characters (symbols etc.) as this causes problems in the later process (file ripping and printing plate output).

Rich Black (paper and carton)

- For rich black, a combination of C50/M30/Y30/K100 is recommended.

Solid Black - Label (silkscreen)

- Black in silkscreen print is absolutely opaque and does not require any color backing.

Solid Black - Label (offset printing)

- a solid black background should be defined with C80/M80/Y80/K100 for offset printing.
- Smaller elements can be supported with 40% Cyan.
- Very small elements (legal lines, small logos etc. can be defined with black ink only (please set to overprint).

Color Standards

- The **output intent** of your PDF/X file should be the valid ICC Profile (**PSO Coated V3** for Europe or **GRACoL_2013_CRPC6** for USA/Canada).
A file set containing RGB and CMYK profiles along with CSF files (for use with Adobe CC applications) can be supplied by our customer service or our graphic/prepress unit.
- Up-to-date information (also about “Uncoated” profiles) is available on our website.

Physical colour proofs and Color Matching

- We print according to ISO standard 12647-2.
- We can only accept physical colour proofs created to the (actual) valid IDE Alliance ISO 12647-7 standard with a colour media Wedge 2013

Layers and other File Settings

- All images and PDF files should not contain layers.
- Please flatten all transparent objects.
- Neither screen settings nor print curves or tolerance values for clipped paths should be saved with the file.

Templates

- Our print templates are available as PDFs files on our product database. Please register on our website for access.
- Please add the template number you have used in the file name(s) of your files.

UCR (Under Color Reduction)

- Total ink coverage should not increase 300%. All values above this limit will be auto-converted (reduced) using intelligent color conversion technologies.

Colour Trapping

- Colour trappings are set by our printers themselves, matching their individual requirements for an optimal print result.
No need to trap the files on your side.