

## Software & Delivery

### File Formats Guide

Multi-Color can accept data in nearly all formats, however we recommend that artwork be created using:

- Adobe Illustrator (.AI) – all versions supported
- Adobe InDesign or
- Esko Graphics PackEdge
- ArtPro+

Files created in older versions of Adobe are acceptable, but may convert inaccurately.

Do not supply PDF files as final artwork drafts and always supply linked images that can be edited in Adobe Photoshop

### Delivery

- Via Mail
- Via Cloud-Server

We prefer you to upload large data files to our CLOUD. After contacting your representative, you will receive an upload link for your data. Once the upload is complete, please confirm this via mail to your contact person.

### Microsoft-Applications (word, power point etc)

Please keep in mind that Microsoft programmes are not graphic programmes. The artwork in these files must be converted in compliance with our specific graphic programmes, whereby discrepancies may occur. Multi-Color is able to use some file types supplied in these formats, but they are not the preferred format. Any extra work incurred due to the lack of editability will incur extra production costs.

### Specifications for the printing data

To ensure a perfect printing result and to minimize the expenditure in time and costs, your files should meet the following criteria:

- The label format should be obvious from the data. Please send us your file in original size.
- The ink coverage may not exceed 300%.
- Please select the color profile ISO Coated v2 300% (ECI).
- For the finishing process we need a surplus of at least a bleed of 2mm around the label.
- For cut & stack labels, please deliver the die-cut as a separate vectorised graphic layout.
- Please include a PDF (MCCjoboptions are available as a download)
- Always enclose the fonts (no PostScript-Fonts) and in addition, convert the file data into paths.
- For hot foil, embossing, etc. please add the data as a vector graphic and one solid color.

**In order to guarantee a perfect print result and to keep the time required as well as the costs low, the data supplied should meet the data creation criteria.**

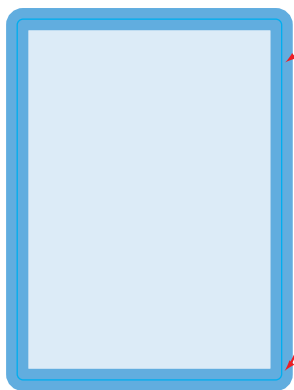
### Contact

If you do not yet have a personal contact, you may contact your responsible sales representative on our website [www.mcc-bingen.com](http://www.mcc-bingen.com) under „Contact“. He will be glad to advise you.

## General Artwork Setup

### Die-cut

When constructing an artwork for a label, always include a cutting line which reflects the size and shape of the finished product.



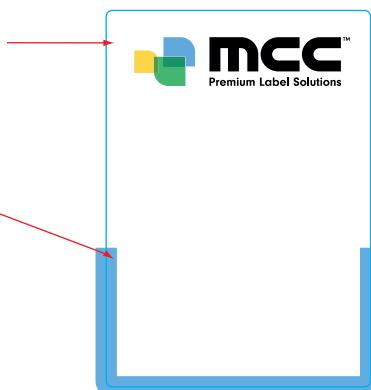
The cutter shape should be defined by a true colour and defined as „cutter line“. The cutter shape needs to have the attributes set to “Overprint Stroke”.

All sharp corners of the cutter need to be rounded to 0.8mm

### Image Area

Please keep all text and graphic elements 1.8mm away from the edge of the label (cutter).

Borders that follow the shape of the cutter need to be at least 2mm wide on the inside of the cutter. This will prevent borders from looking uneven due to slight cutting tolerances.



### Artwork Size

Always set the size of the artwork to the actual size. Please state the size of your label on the artwork and supply a printout at 100% of the label size.

### Bleed

Multi-Color requires a minimum of 2mm bleed on all elements that print over the edge of the labels. This is required to prevent white lines appearing on the edge of the labels due to cutting tolerances.



### Colouring

The number of colours to be printed should be marked in a legend. Process colours, spot colours, foils, screens, embosses and graining patterns clearly marked.

Pantone PMS colours need to be correctly defined in the artwork, or custom colours named & clearly noted.

### Images

- Always in CMYK or solid color.
- Line drawings (bitmaps) need a resolution of at least 1200ppi
- Grayscale/color images at least 300ppi
- Insert correct color profile ISO Coated v2 300% (ECI)
- Suitable file formats: TIFF, PSD, JPEG (high resolution)

## Illustrator Guidelines

Illustrator CC is our preferred Artwork format.

As per the Label Printing Industry standard, Multi-Color uses a workflow that requires all supplied artwork to be editable in Adobe Illustrator.

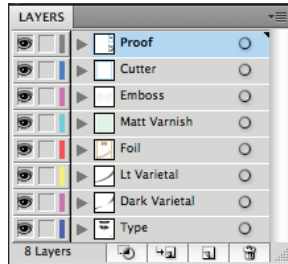
### Layers

Please use layers to construct artwork - do not flatten layers.

If a layer is hidden, or not meant to print - delete it. This will make editing easier.

A simple layer construction is shown right:

- a layer that contains black type
- a layer for each spot colour
- a foil/foils layer
- a varnish layer
- an emboss layer
- a cutter layer
- an instruction layer.



This is a sample to illustrate how an artwork can be broken down into layers for more accurate and efficient colour separating and trapping. Layer structure will depend on the requirements of the artwork.

### Fonts

Artwork should be supplied with fonts live.

If possible, an additional file should be supplied with fonts converted to outlines, titled with „ZW“ in the file name. This should only be applied to a copy of the original file, because outlined text elements can not be changed if a correction is required.

All black type needs to be set to overprint the background. Fine reversed type should be opened up by 0.1pt stroke to prevent the text from filling in on the press.

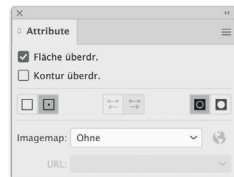
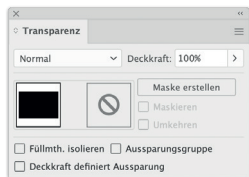
Do not reverse fine type out of process colours or define fine type in process colours. Use spot colours instead.

All fonts used in the job are to be supplied with the artwork - **please do not use PostScript fonts**, we cannot process them.

### Transparency Effects

Wherever possible, please do not apply any Transparency Effects in Illustrator, but leave them at normal opacity, 100%. Photoshop is a better tool for transparency for reproduction, and will provide more desirable print results, being more user friendly.

If type or graphic elements need to overprint a background, please set them to „Overprint“ in the Attributes panel.

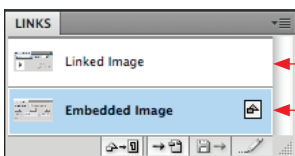


**Note it is important to keep all vector artwork that has no transparent effects in Illustrator as vector art, and do not grid/raster it in Photoshop.**

### Links

Do not insert any linked images placed in Illustrator.

The linked high-res images must be supplied with the artwork file. We have very little control over embedded images.



Linked files ✓

Embedded files ✗

### Trapping

Do not attempt to trap any parts of the artwork. Multi-Color has advanced software to do this in accordance with our press specifications.

If you have experience in creating print data, you are welcome to consider the print specifications listed at the end.

## Photoshop Guidelines

**Please supply layered Photoshop files with all artworks.**

Images need to be high resolution - minimum 300dpi when the image is placed at 100% in the artwork.

Final files should be CMYK, plus spot channels if required. If you supply an RGB file, it will be converted and a colour shift may occur, or we may request your artwork to be corrected & resubmitted.

If the image is to have a spot colour as a separation - save it using DCS2 format, and allocate the correct colour to the required spot colour channel.

Please ensure there is enough bleed past the edges of the visible image area of a minimum of 2mm.

Please do not flatten layers - supply to us the layered working Photoshop file as we often need to edit the file. Delete any unnecessary excessive layers to reduce the file size.

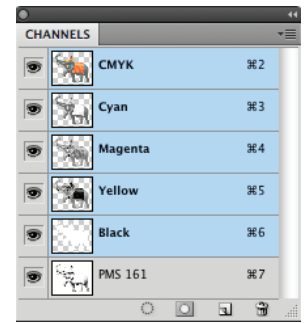
Bitmap images have to be at least 1200dpi or higher without any compression.

Do not save as CMYK jpeg or RGB jpeg for final linked files as loss of quality is likely to occur.

We prefer raster/grid images to be in an uncompressed format. Please do not submit or place JPEG's or other compressed formats into artwork.

Do not create text or linework objects in Photoshop - Illustrator is the tool to use for text.

If possible, create all shadows & transparency effects in Photoshop. It is a lot more user friendly to separate and edit than creating them in Illustrator.



## Barcodes

If a barcode in the artwork is to be created by Multi-Color, a space & positional is to be defined clearly marked as "Positional". Multi-Color's standard procedure is to replace all supplied barcodes with barcodes created by Esko-Graphics software. Please note that Bar-x software utilises a default font to create the visual barcode number that may vary from your supplied barcode font.



### MINIMUM MAGNIFICATION FACTOR

0,82% (SC0,13 digits)

Width incl. rest zone min. 31mm, High min. 10mm

0,82% (SC0, 8 digits)

Width incl. rest zone min. 22mm, High min. 10mm

The rest zone is the white area, which must remain free on the right and left. It is technically always recommendable to allow more space for the rest zone as is actually required by standard.

## Press-Ready Artwork

Multi-Color has the technology and experience to produce labels that include all of your specified requirements. Some of our presses can be configured but others are static. If it is your wish to set up your artwork ready for printing, please email a PDF of the finished design to your Multi-Color Sales Representative and advise them of your required label print quantity. This will allow us to allocate your design to the most effective print technology. Once this is done, a Multi-Color team member will contact you and advise you of the required print sequence and the trapping that needs to be applied.

## PRINT SPECIFICATIONS

### COLOR PROFILE

Paper type 1 and 2, glossy and matt coated  
ISO coated v2 300% ECI

### MINIMUM FONT SIZE

3pt positive 4pt negative 6pt multi ink

### Überfüllung/Unterfüllung

0,1mm Minimum 0,12mm Maximum

### MINIMUM LINE THICKNESS

0,1mm positive 0,25mm reverse out 0,4mm multi ink

### MINIMUM LINE THICKNESS GOLD COLOR, HOTFOIL AND BRONZE

0,1mm positive 0,25mm reverse out  
Distances to the individual elements min. 0,3mm, otherwise it is not possible to prevent the surfaces from cover up.

### MINIMUM DOT SIZE

on files 2% printed on the packaging 2% Offset / 3% Flexo

### MIN./MAX PRINTABLE DOT (VIGNETTE RANGE)

2% Minimum Offset 97% Maximum 300% ink coverage  
3% Minimum Flexo

### SUBSTRATES

Paper, Poly Film, Poly Clear, Foil

### PRINTING PROCESS FRONT- AND REVERSE-PRINTING

Offset, Flexo, Silkscreen, cold foil, hot foil

### DOT GRAIN

Print overlay for:	C offset	M offset	Y offset	K offset	Flexo	
1% on the file	2%	2%	2%	2%	0%	on the packaging
2% on the file	2%	2%	2%	2%	0%	on the packaging
3% on the file	4%	4%	4%	4%	7%	on the packaging
4% on the file	5%	5%	5%	5%	9%	on the packaging
5% on the file	7%	7%	7%	8%	11%	on the packaging
10% on the file	14%	14%	14%	16%	26%	on the packaging
20% on the file	28%	28%	28%	30%	40%	on the packaging
25% on the file	34%	34%	34%	37%	45%	on the packaging
40% on the file	53%	53%	53%	56%	60%	on the packaging
50% on the file	64%	64%	64%	67%	68%	on the packaging
75% on the file	87%	87%	87%	88%	86%	on the packaging
80% on the file	91%	91%	91%	92%	89%	on the packaging
90% on the file	96%	96%	96%	97%	95%	on the packaging

### NUMBER OF PRINTABLE COLORS

Offset 6, Flexolack 2, Flexo 9

### PRESS DENSITIES

1,42 Cyan  
1,45 Magenta  
1,35 Yellow  
1,75 Black

### STANDARD PRINTSEQUENCE OF CMYK

1 Yellow  
2 Magenta  
3 Cyan  
4 Black

### STANDARD ANILOX CMYK Flexo for adhesive labels

120 l/cm<sup>9,97</sup> cm<sup>3</sup> Schöpfvolumen

### SCREEN RULING - Wet glue labels

225 lpi, 89 lpc

### SCREEN RULING - Adhesive labels

154 lpi 60 lpc

### SCREEN ANGLES

15° Cyan  
45° Magenta  
90° Yellow  
75° Black

## Proofing Guidelines

You are more than welcome to attach a colour-proof or colour-chart with your data. We will be happy to take this into account.

Please include a copy in Adobe PDF format of each artwork delivered to Multi-Color. If you decide to make changes to an artwork and resupply a new Illustrator file to Multi-Color, please also include a new PDF reflecting those changes to your Multi-Color Sales Representative.

Always provide a colour target for artwork that includes 4 colour process elements. Multi-Color will then create a Proof that matches your supplied target in accordance to Industry Standards. This proof is generated reflecting the printing technology that will be used to print your labels.