KLEINHEMPEL GROUP

DATA DELIVERY — 1026

Technical Background Information on Data Preparation.

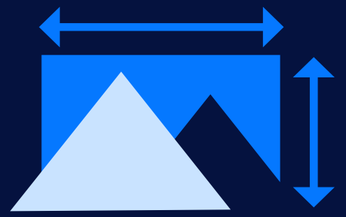
How to Achieve an Optimal Result.



At a Glance

All Requirements for a Smooth and Error-Free Printing Process.

- Bleed Allowance & Safety Margin
- Cut Contour
- Colours
- Fonts & Gradients
- Multi-Part Artwork
- Output Size & Resolution
- File Names & Data Format
- Data Transfer & Data Preparation



Bleed Allowance & Safety Margin

Protection for Important Artwork Elements.

Bleed Allowance

Please always add a **10 mm bleed** all around, based on the final format.

Safety Margin

Place important elements, especially text, **at least 100 mm from the edge**.

Background images, colours, gradients and graphics

should always extend to the edge of the file format, as minor production tolerances can occur during the finishing of your print.

Cut Contour

The Vector Path for Machine Cutting and Routing.

A cut contour is possible with almost all our materials and allows creative designs for your products.

Create a layer named “**CutContour**” and create the cut path on it.
Assign the cut path a 1pt overprinting outline in the spot colour “**CutContour**” with the following colour values: 0% Cyan, 100% Magenta, 0% Yellow, 0% Black

The artwork must be created 20 mm larger than the cut contour to avoid white edges.

Colours

CMYK Only. No RGB.

We accept CMYK and Euroscale values. **Spot colours** such as HKS or Pantone and data in **RGB colour mode** are converted to CMYK by us for digital printing. If your data is ICC-profiled, it is automatically converted to the colour space of our output devices in the best possible way. Our recommended colour profile for data delivery in the CMYK colour space: **ISO Coated v2 (ECI)**.

Inkjet printing processes without a DIN ISO standard may show higher colour deviations (ΔE).

Setting Up Black Correctly

For black areas to appear **a true rich black**, it is necessary to add what is known as a rich black build. This adds cyan, magenta and yellow components to the black. This applies only to large black areas and headlines – not to smaller font sizes! Our recommendation for fabrics and textile materials is:
45% Cyan, 55% Magenta, 50% Yellow, 100% Black

Fonts & Gradients

Vectorised Text and Smooth Colour Gradients.

Fonts

Please make sure that all font elements are embedded in your print data. Fonts are usually embedded automatically after PDF export.
If this is not the case, you should convert your text to outlines.

Gradients

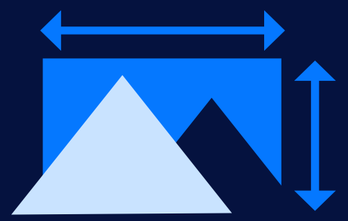
To create smooth, even gradients, we recommend building them in **Photoshop** and adding a slight **noise filter**. Vector gradients, as created in InDesign and Illustrator, tend to appear banded, especially in very light areas.

Multi-Part Artwork

No Need to Divide the Artwork Yourself.

Please set up artwork to be produced in multiple parts as a single piece, **without overlap**. We will divide the artwork during production.

When creating your data, please pay attention to the **positioning of artwork elements** and text with regard to the panel division, e.g. cuts through logos, faces, typography etc.



Output Size & Resolution

The Right Ratio of Format and Image Resolution.

Please set up your file at **1:1 scale to the output size** wherever possible, or otherwise proportionally to the output size, so that we can scale the data accordingly. Please note that the resolution must also be sufficient for the final output size (e.g. a banner at a scale of 1:10 with an image at 300 dpi resolution will only have 30 dpi at the final print size). Please take this into account when exporting your PDF!

In relation to the output format, your images should generally not fall below a **resolution of 62 dpi**, otherwise the print may appear pixelated.

Large Format Printing

For large-format prints, the required resolution depends on the viewing distance. For large prints, around 30 dpi at final size can be sufficient:

- up to 10 m^2 › 100–150 dpi
- up to 50 m^2 › 50–100 dpi
- over 50 m^2 › 30–50 dpi

File Names & Data Format

File Types and Naming.

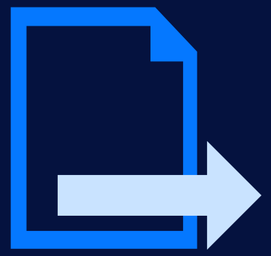
File Names

Please do not use overly long file names, 15 characters should be sufficient. Please also do not use **any special characters** (e.g. %, &, $) or **umlauts** (ä, ö, ü) in your file names. We recommend also noting the **order number** in the file name.

Data Format

As a universal print data format, please send us a PDF file, exclusively in **PDF/X-1a, PDF/X-3 or PDF/X-4 standard**. Pure image data
can also be supplied in TIFF format.
Final size and bleed frames must be correctly defined (see “Bleed Allowance” for more information).

Please do not add crop marks, registration marks or colour control strips.



Data Transfer & Data Preparation

Handover to Our Production.

Data Transfer

- Transfer via data link, e.g. WeTransfer
- By email to prepress@kleinhempel-group.de (up to 30 MB possible)

Print Data Preparation

We are happy to take care of professional print data preparation for you.* Simply send us open, editable data conveniently including all required links and fonts.

*For deviations from our specification sheet, we charge additional costs at €45 per started half hour. Additional image editing and unusual processing times will be charged separately by arrangement.

KLEINHEMPEL GROUP

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