

## heaven 42 - an absolute white coated paper.

With the design of heaven 42, a new colour space was unlocked. Particularly technical motifs (shades of grey, 4c silver, pronounced clear/obscure contrasts) create a highly brilliant and neutral effect.

Warm shades (e.g. flesh tones) may require colour adjustments. heaven 42 excels with its superior print qualities, a reader-friendly contrast (particularly for fine reverse types). With a degree of whiteness at 155 CIE, heaven 42 offers strong compatibility with uncoated papers.

The luxurious matt, porcelain-like feel of the softmatt surface is suitable for all kind of applications.

Excellent runnability and stacking properties, a very reliable dimensional stability and outstanding folding characteristics, a high level of rub resistance and good ink absorption allow a seamless production process.

## GENERAL INFORMATION

### Colour adjustment

During extensive print trials it was confirmed that the ICC profile can be used as described below. This profile can be downloaded from [www.heaven42.com](http://www.heaven42.com) (to be replaced/updated by Igepa)

The absolutely white paper shade of heaven 42 impacts on the printing process as well as on the pre-press stage. With the same colouring and dot gain, the printed image can look significantly colder if separation remains unchanged (e.g. with ICC-profile "IsoCoated\_v2").

This feature is beneficial in most cases, e.g. technical motifs. However, with images of people or cosmetics, the high degree of whiteness can lead to undesired effects.

In that case, print settings have to be adjusted to achieve the desired colour shades. For that purpose, it is important to achieve the appropriate full-tone colourings in the printing process and that tonal value increase is correct (for CtP: RIP controlled). Subsequently, reproduction differences between heaven 42 and other paper qualities can be compensated. Depending on the other types of paper, the compensating curve may have to be adjusted through RIP.

In order to eliminate changes in the print reproduction to a large extent, we generally recommend to create a special ICC colour profile – regardless of the printing screen. In that context, please note that when measuring heaven 42 with L\*a\*b\* a very high negative b\* value is generated which can lead to distortions during proof simulations and needs to be adjusted.

We have generated an ICC-profile for heaven 42, which can be downloaded from the website [www.heaven42.com](http://www.heaven42.com) (to be replaced/updated by Igepa). However, any profile can only be applied for those printing conditions for which they were specifically generated. We therefore cannot be held liable for the achieved print results.

## **Printing Colours / Varnishes**

Standard inks can be used. We recommend inks with enhanced rub resistance.

Due to the fact that signs of rubbing on extremely white paper shades tend to be easily visible and rather disturbing, we recommend the use of a protective varnish with a matt or satin dispersion varnish. To keep the tactile feel of the paper small quantities of the varnish should be applied, unless a special effect is desired.

With extra matt surfaces, it is generally unavoidable that the same machine settings generate printing colours with a slightly lower density than standard coated papers (depending on the level of density, between 0.1 and 0.2).

Hence, it might be necessary to increase the amount of ink slightly to achieve a specific colour density. This step is particularly beneficial if the printing process shifts from printing standard papers with relatively low density to printing on heaven 42 soft matt without changing the printing conditions.

In order to reduce the total thickness of the colour coat, intensive ink series can be used as an alternative. A slight decrease in density can also take place during the drying process.

On the soft matt surface of heaven 42, metallic colours do not create an overly metallic effect because of its matt surface. The effect of the metallic ink can be improved by underlying colours with a screen of about 20 %. When applying silver it is recommended to use cyan or black, when printing gold effects it should be yellow. This action will change the colour of the metallic ink and it is advisable to arrange a test before printing.

Special colours (e.g. Pantone or HKS) can have a slight change in tone, due to the high whiteness of heaven 42 softmatt. We recommend consultations with the ink manufacturer.

## **Ink Absorption / Drying Properties**

Good ink absorption, comparable to matt coated papers. In case of print jobs with extremely high solid areas smaller stacks are recommended. As for all coated papers with a matt surface the drying process is only completed after 24 to 48 hours. If further processing has to start earlier, make sure the necessary caution is exercised.

## **Runability**

High level of dimensional stability, very good runnability.

## **Stacking Properties**

Good stacking properties – even at high machine speeds. We recommend standard spray powder.

## **Screen Resolution**

Easy printing with all frequency-modulated and conventional screens and fine screens.

## **Folding**

Very good folding characteristics, scoring is generally advisable for basis weights starting from 150 g/m<sup>2</sup> and up. For printed folds, scoring may even be necessary for lower substances.

## **Scoring , Embossing**

Problem-free.

## **Adhesive Binding**

Problem-free; because of increased strength of binding, we recommend PUR glue. Ageing stability in line with DIN 6738, Lifespan class - LDK 24-85.

## **Varnish and Laminations**

- Only slight gloss enhancement with print varnish – therefore not advisable for special effect varnishing. In addition, it lengthens the drying time.
- Dispersion varnish (partial and solid application): depending on the type of varnish, slight to medium gloss enhancement. Thus, recommended as a protection varnish.
- Significant gloss enhancement through UV varnish; highly recommended for special effect varnishing (spot varnish).
- Film lamination possible. Stunning effects with matt film lamination.