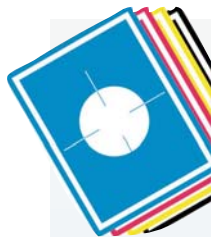
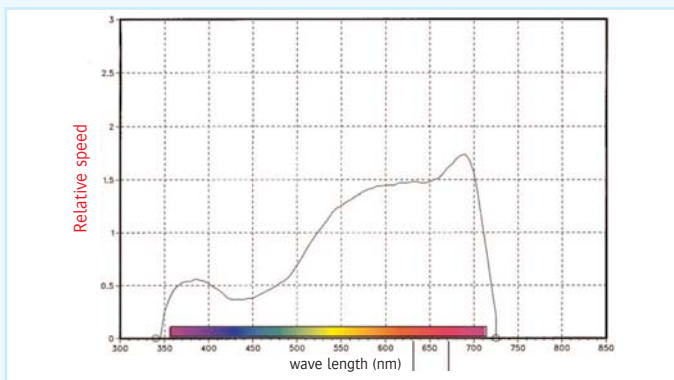


Product features



Description :

Setprint Plus is a single sheet, positive working, offset plate, especially designed for exposure in imagesetters. The light sensitive layer is coated onto a polyester base. Silver diffusion transfer generates the image. A press ready offset plate is obtained after exposure, development and stabilisation.

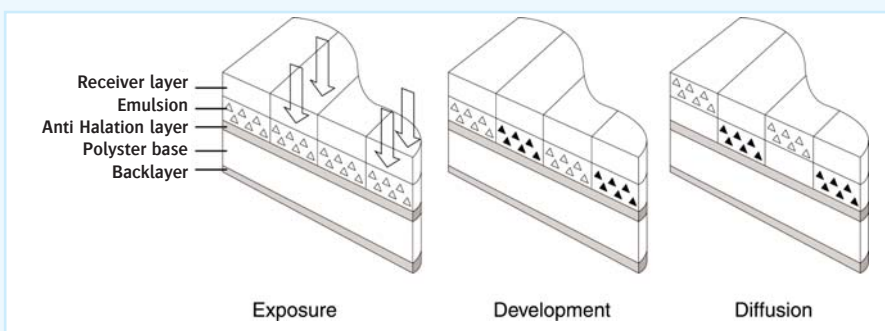


Features

- Wide exposure latitude
- Long shelf life
- Stable chemistry
- Good chemistry lifetime
- Very good press latitude
- Stable during the run
- Good run length

Spectral Sensitivity:	Visible Red
Useable Wavelength:	630-670nm (HeNe-lasers and red laser diodes)
Base:	Polyester
Thickness:	0.13 and 0.20 mm (5 and 8 mil)
Run length:	20.000
Resolution:	175 lpi, 5-95%
Inks:	All conventional offset inks
Fountain solutions:	G671c / G648c as system fountains
Corrections:	Supermaster / Setprint Plus correction pens
Reprints:	Not advised

Principle: How it works



The Setprint Plus material consists of 4 different layers coated onto a polyester base. During exposure the light penetrates the Receiver layer and strikes the silver halide emulsion layer underneath, where the latent image is formed. The emulsion layer also contains the developing agents. An alkaline activator is used to start the development:

- The silver halide crystals which have been exposed turn black and the non-exposed silver halide crystals dissolve and diffuse into the nuclei layer where they are deposited to form an ink receptive silver printing image.
- The plate then passes through a stabiliser that stops development and adjusts the plate surface to a suitable pH for offset printing.
- The anti-halation layer prevents image quality loss through reflection in the emulsion layer.
- The backing layer is coated onto the polyester base to ensure that the plate transports well in the imagesetter and that the plate lies flat and adheres well to the plate cylinder.

Exposure settings

Setting the laser intensity is extremely important because it directly influences the behaviour of the plate on the press.

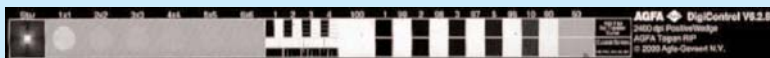
- Overexposure gives a weak silver image on a deep black background, possibly resulting in slow ink pick-up and low run length.
- Underexposure gives a grey silvery background, resulting in background toning.
- Correct exposure gives a bright silver blue image on a black background, resulting in maximum run length and good ink-water balance.

Exposure

Determining Correct Exposure

Two methods can be used to determine the intensity level with which to expose Setprint Plus plate for optimum plate performance.

- Using the imagesetter's built-in test target (a series of screen tints at many different exposure levels). Expose and consequently develop a plate containing the series of tints, and visually inspect, with a loupe, to determine the range of exposure settings that apparently results in a geometrically correct 50% dot.
- With a "Digicontrol 6.2.8. pos"-wedge.



Expose a series of wedges on the plate at different exposure settings. Set the exposure intensity so that the density of the 2x2-pixel area is identical to the density of the 3x3, 4x4 and the 6x6-pixel area. This can be checked visually or by means of a densitometer. At this exposure a 50% screen is also exactly reproduced as a 50% on the plate in a linear imagesetter. 2x2 may not be usable on engines with lower optical quality, in that case use 3x3 pixel area as reference

Plate development

Setprint Plus is developed in a 3-bath Rapid Access processor with activator, stabiliser and water. A range of Rapid Access type processors is available that will do the job. The main criteria determining the choice of a particular model is the volume of work, the plate width, plate thickness and the need for off- or on-line processing. A processor MUST have dry entry rollers. If activator is present on the entry rollers a pre-development will occur, potentially creating image artifacts on the plate.



Recommended dwell time
Processing temperature
Replenishment

Agfa Activator

G5200b
20 sec.
30°C or 86°F
G5200b
120 ml/m²

Agfa Stabiliser

G5400b
Room temperature
G5400b
120 ml/m²

User guidelines

Plate Correction

Because Setprint Plus plates are exposed digitally in an imagesetter, plate corrections are not common: cut lines and dust spots will not exist on the plate. When necessary, image deletions and additions are still possible after the plate has been processed.

Image Deletion

The Setprint Plus Deletion pen contains a fluid that dissolves the silver deposits on the plate. The pen can be used in one of 2 ways:

- On a dry plate. This is the best method as the image is clearly visible. Apply, let stand and wipe off with fountain solution or water.
- On press, after removing the ink with plate cleaner. With this method, caution is necessary as the plate can be easily damaged while it is wet.

Image Addition

Additions can be done in the following 2 ways:

- By gently applying the fluid where image is wanted.(on a dry plate)
- On the press, parts to be corrected have to be cleaned first with plate cleaner, let the plate dry. With this method, caution is necessary as the plate can be easily damaged while it is wet.

Fountain Solutions

There are many universal type fountain solutions that work equally well with Setprint as with metal plates. If Setprint Plus is the only plate material to be used, Agfa has especially developed fountain solutions for polyester plates

G671c	Fountain Solution (Usually 2 to 5%)
G648c	Fountain Solution (Usually 3 to 8%)

Note:

If using alcohol substitutes, anti-foaming agents or biocides it is wise to do a compatibility test. Setprint Plus plates do not require gum in the fountain, because the surface of the plates does not need to be protected from oxidising.

Inks

Most offset inks are suitable for use with Setprint Plus plate material. Some inks will run better than others will, (same as with metal plates). Inherently, cyan and magenta inks tend to be more difficult inks to print with than black and yellow inks. UV inks are by far the most difficult to print with. They tend to attack the image area and cause reduced run lengths and sometimes toning.

Packaging

Daylight rolls and Cassettes

Storage

Prior to processing:	24 months after date of manufacturing when stored below 20 °C (70°F)
After processing:	Several months if plates are protected from light and high relative humidity