

AVITONE P1P AND P3P

Negative acting, orthochromatic continuous tone duplicating film.

Avitone P1p and P3p are negative acting, orthochromatic continuous tone duplicating films for black-and-white originals.

Thickness of the polyester base:

P 1 p: 0.10 mm (.004").

P 3 p: 0.18 mm (.007").

■ Applications

The films are suitable for duplication of continuous tone negatives, such as aerial or other photographic originals, either in contact (with or without electronic contrast compensation) or by projection when enlarging images.

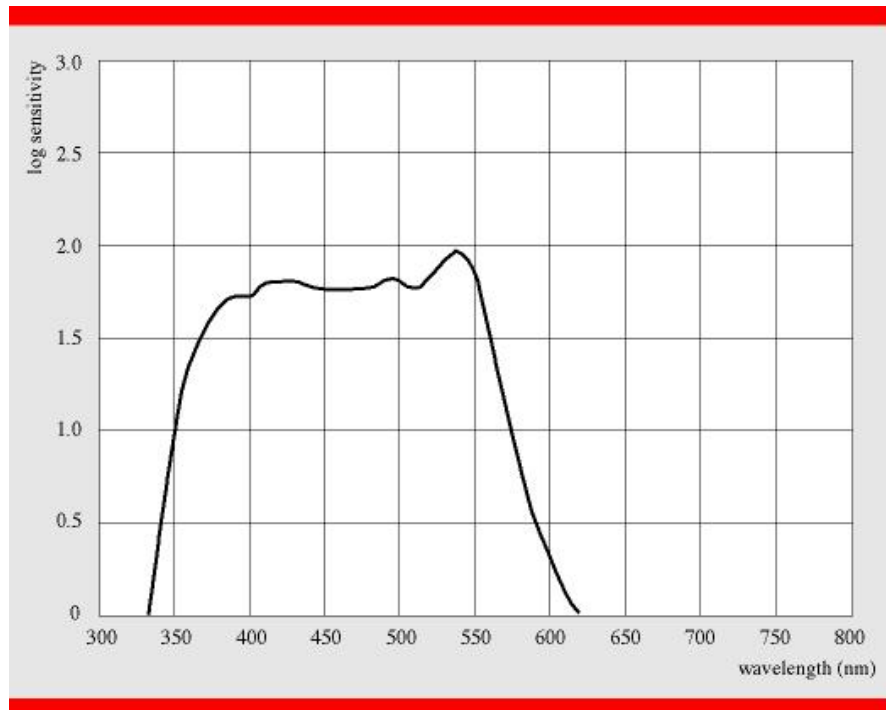
The films can also be used for film duplication in cartographic and military applications.

■ Features

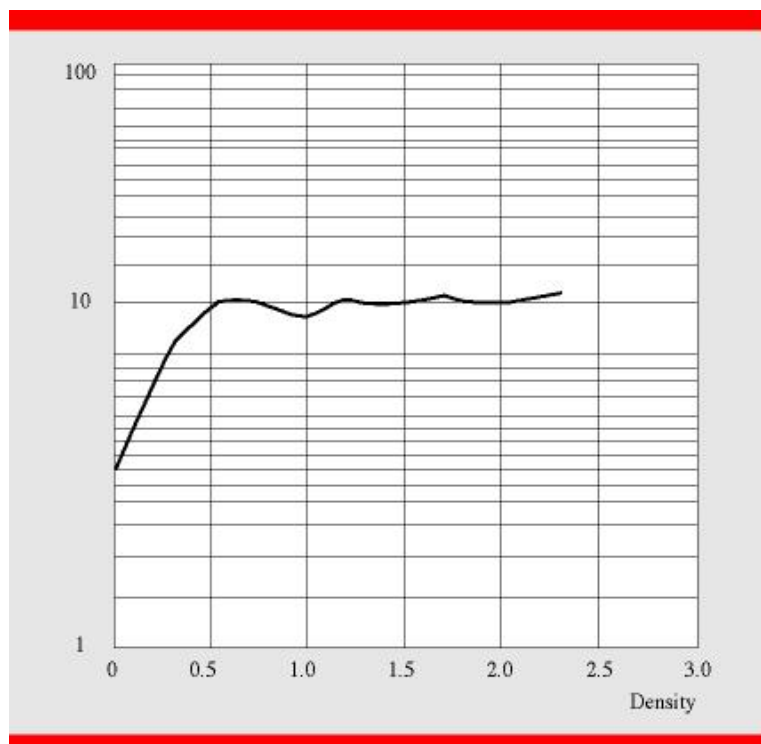
- Very high resolution: clear cut line definition and therefore excellent detail rendering.
- The fine grain emulsion enhances detail rendering. Reproduction can make the weak contrast in some originals stronger until it reaches an optimum level. The fine grain structure is maintained even with extended development.
- The image contrast and gradient of Avitone P1p and P3p can be controlled by adjusting the developing time. You will obtain good results by over-developing underexposed films and under-developing overexposed images.
- The density range can differ with every original. By adjusting the developing time the copy will reach a density suitable for optical projections.
- Dimensionally stable duplicates can be made under strictly controlled processing conditions, i.e. an homogeneous pressure/vacuum on the contact frame, a drying temperature of maximum 45 °C/113 °F and a relative humidity between 30% and 60%.
- The back layer contains anti-halation dyes to ensure image definition.
- The film is anti-static, before and after processing.
- Avitone P1p and P3p can be processed in various continuous tone developers, in machine or in tray.

■ Photographic data

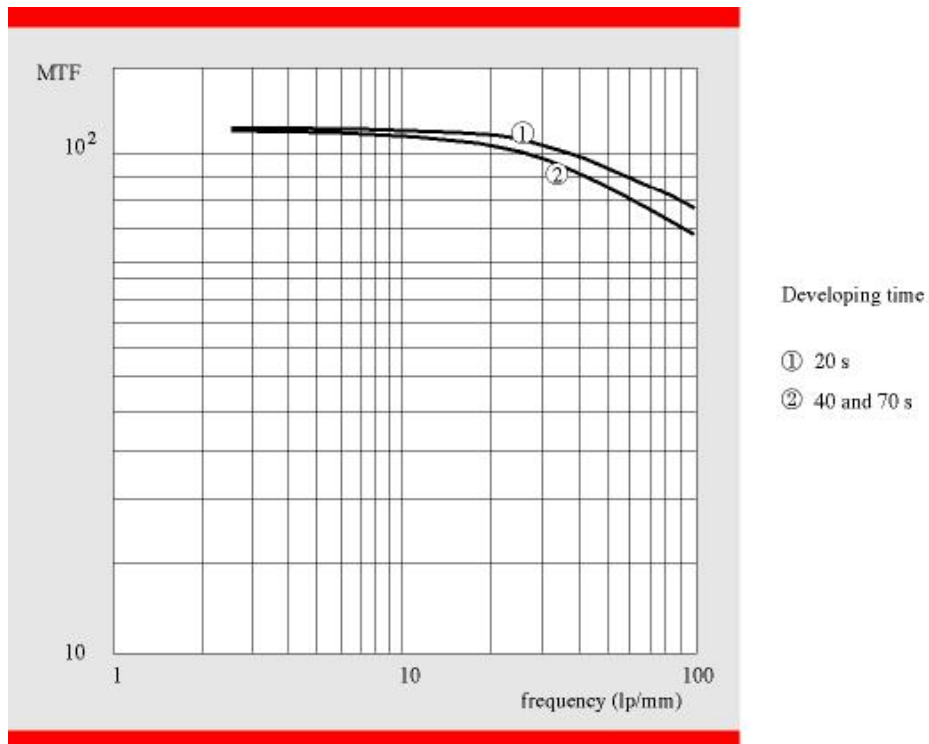
Spectral sensitivity



RMS Granularity



Modulation Transfer Function (MTF)



Resolution

TOC (Target Object Contrast) measured according to ANSI PH 22.23-1980.

TOC 1000:1 = 256 lp/mm or 512 dots/mm.

TO 1.6:1 = 161 lp/mm or 322 dots/mm.

■ Production Guidelines

Darkroom lighting

Red light, e.g. an R6-filter over a 25W lamp at 1.25 m minimum distance from the film.

Exposure example

Klimsch contact frame with halogen point light, light intensity 13 lux.

Exposure time 8 s, Dmin original 0.3, Dmax original 1.3.

Exposure time 16 s, Dmin original 0.6, Dmax original 1.6.

Processing

Avitone P1p and P3p can be processed in machine or in tray.

Automatic processing in Gevatone 66, in G 74 c developer.

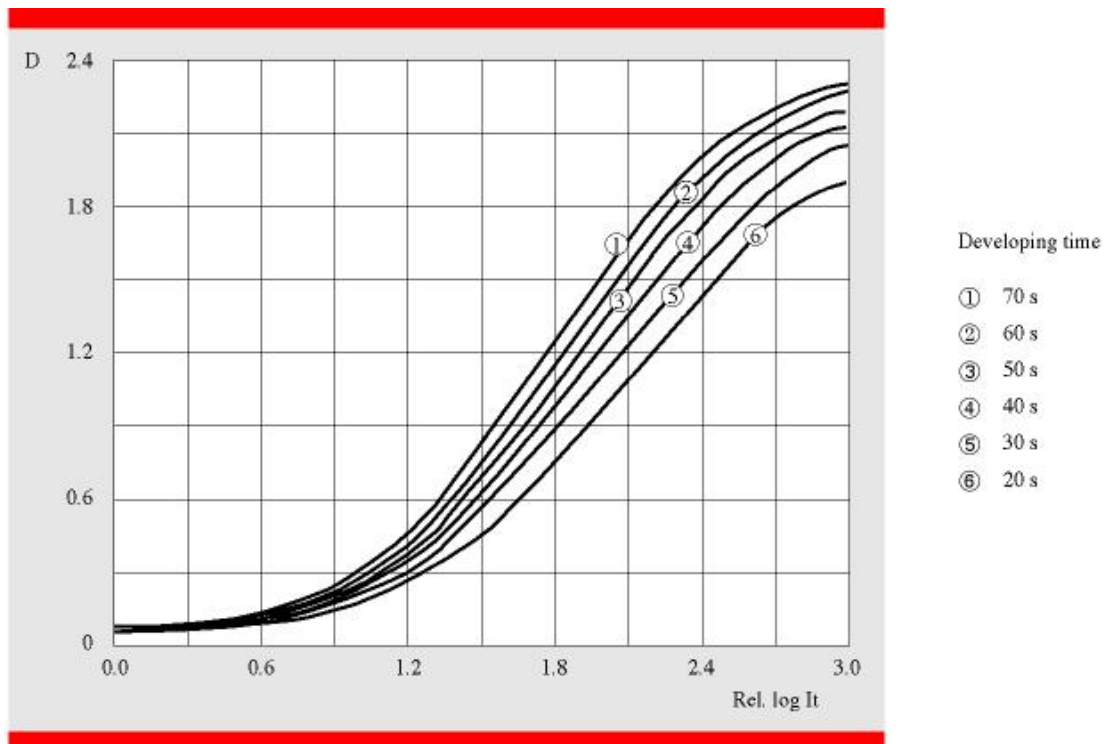
The developing time can be varied between 20 and 70 seconds, depending on the required gradation.

Developing temperature: 30°C/86°F.

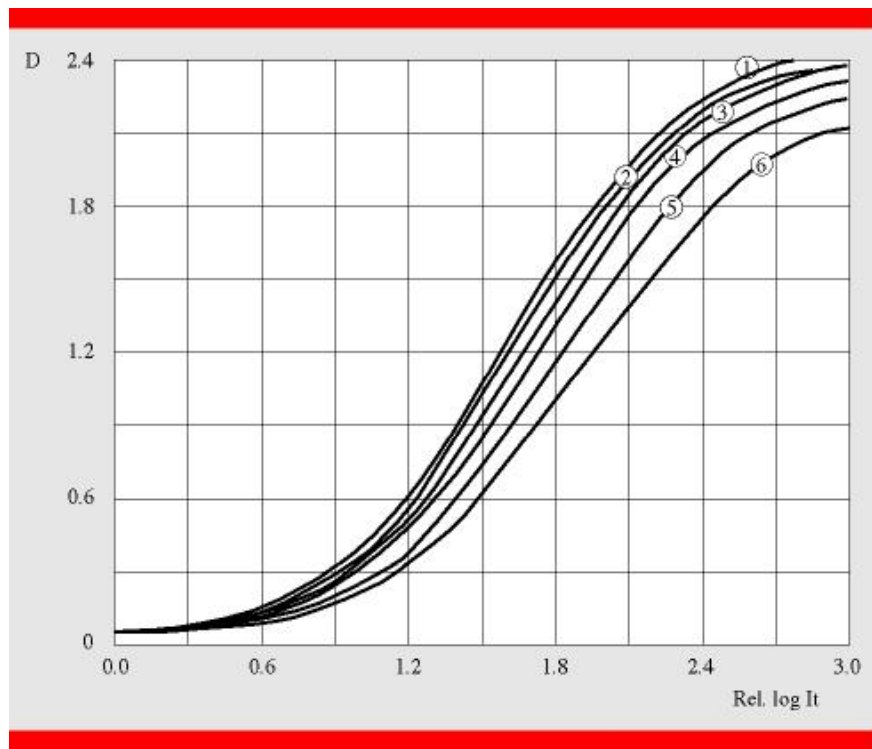
The recommended replenishment rate is 300 ml/m² for the developer and 500 ml/m² for the fixer (PFIX).

- Characteristic curves

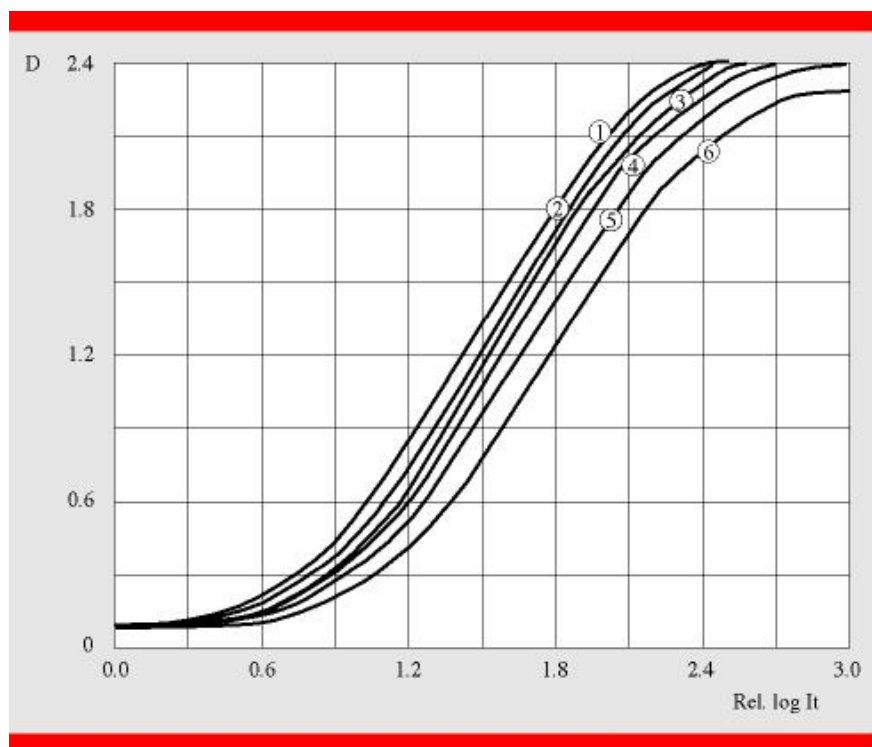
Developing temperature: 25 °C



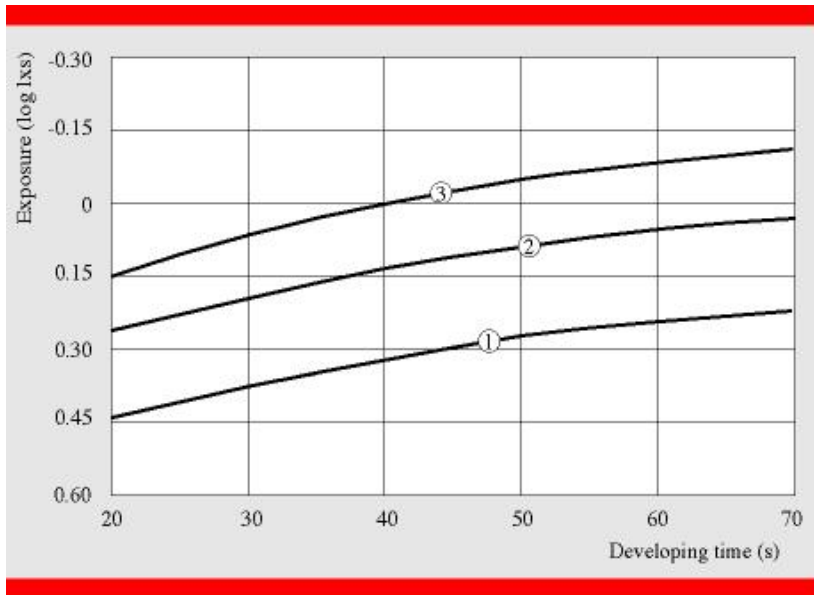
Developing temperature: 30 °C



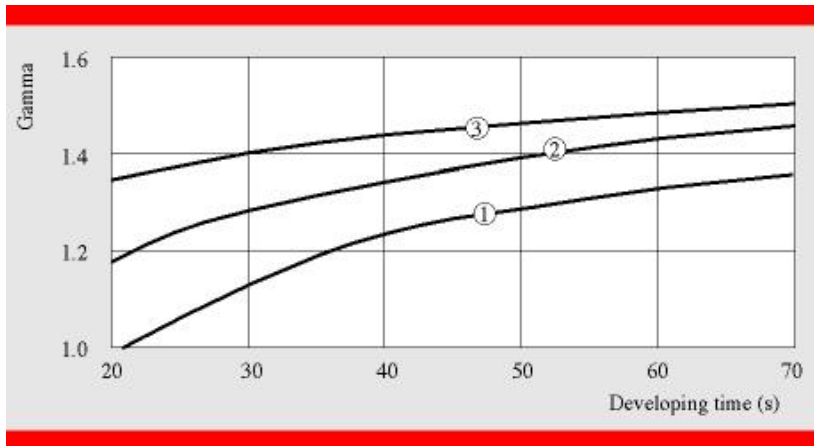
Developing temperature: 35 °C



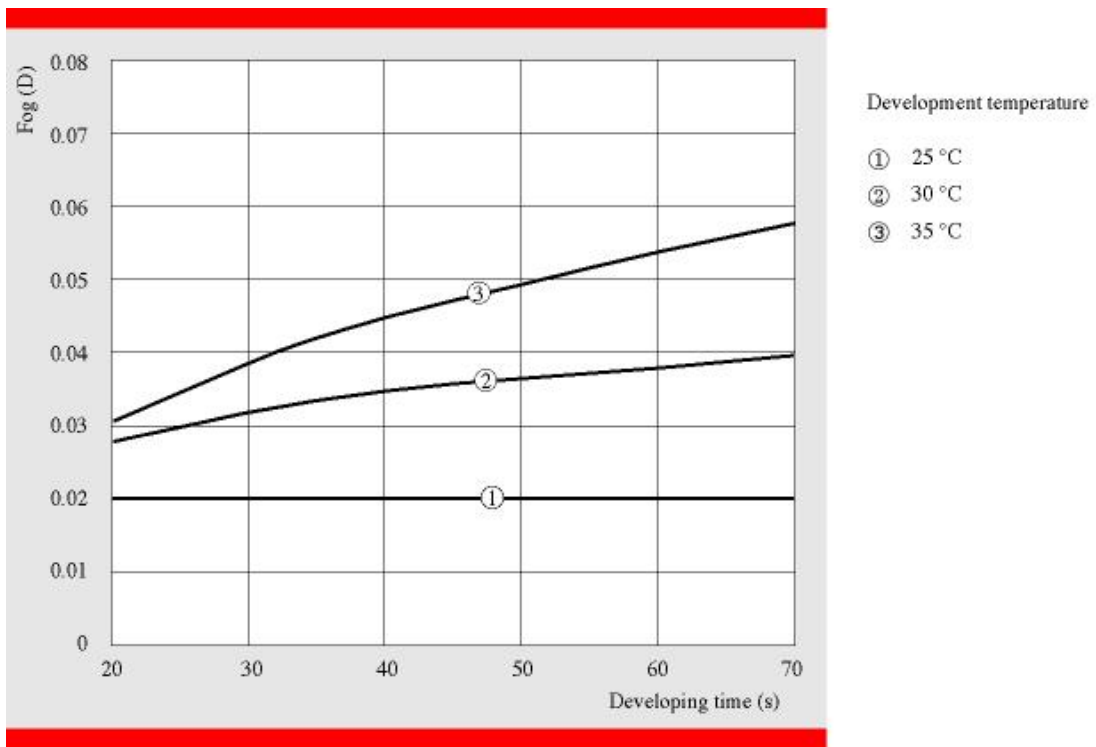
- Exposure/time curve



- Average gradient



- Fog/time curve



Automatic processing in AgfaLine, in PDEV developer

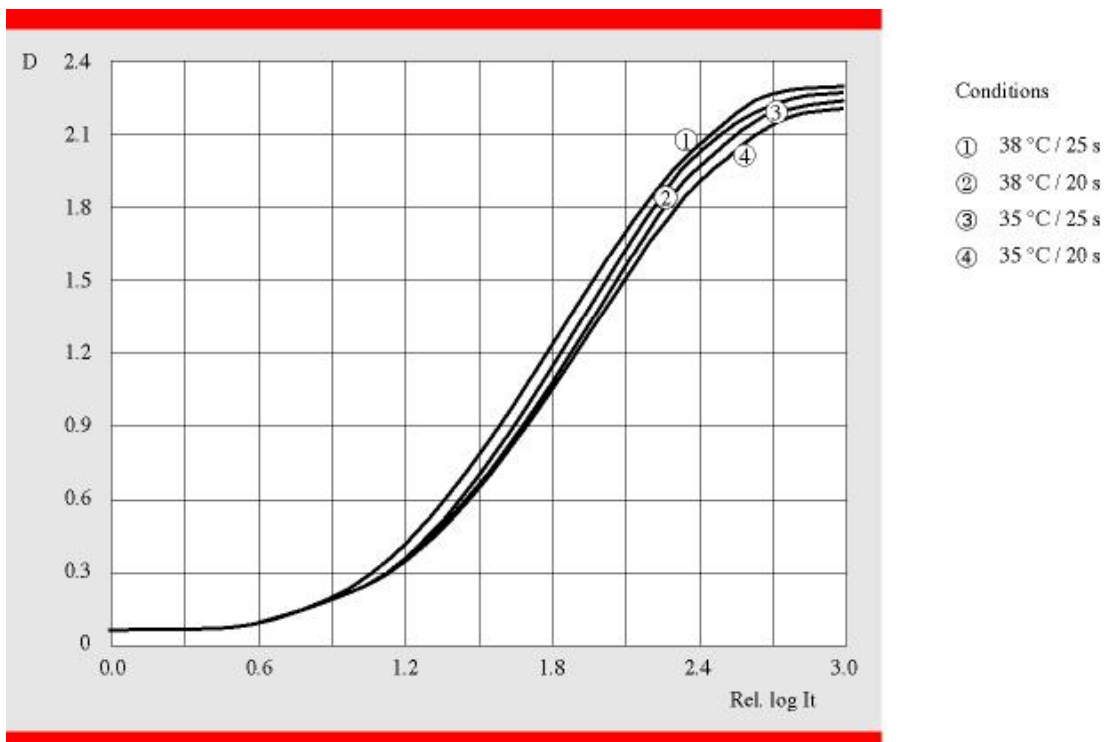
The developing time can be varied between 20 and 25 s, depending on the required gradation.

Developing temperature: 35 °C/95 °F to 38 °C/100 °F.

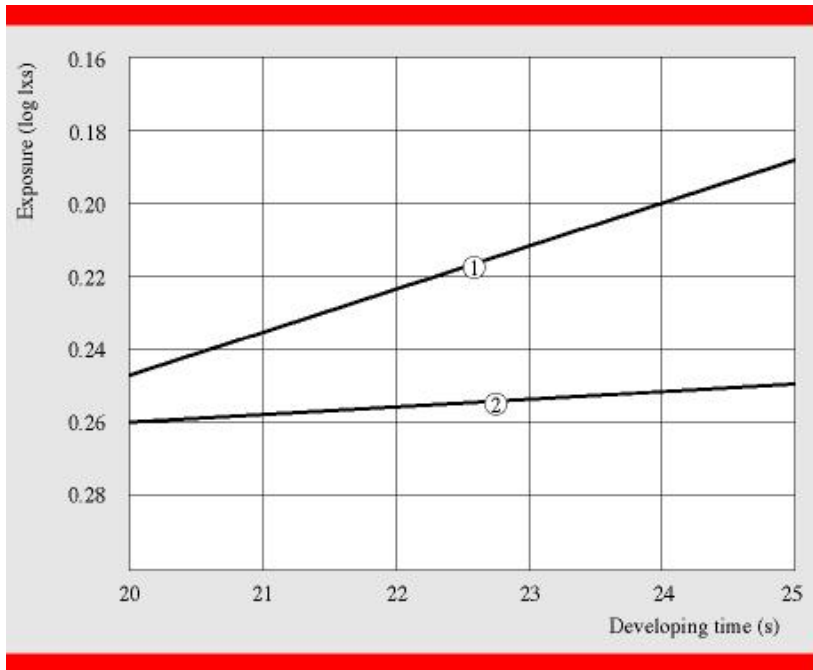
The recommended replenishment rate is 250 ml/m² for the developer and 500 ml/m² for the fixer (G 333 c or PFI X).

- Characteristic curves

Developing temperature of 35 °C and 38 °C



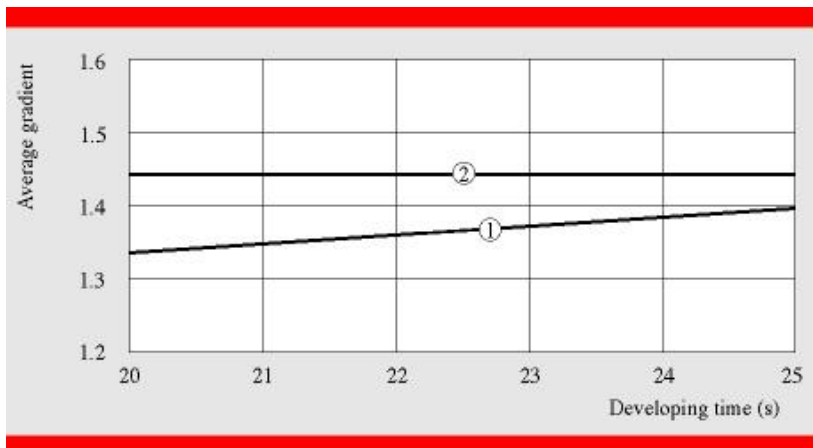
- Exposure/time curve



Development temperature

- ① 38 °C
- ② 35 °C

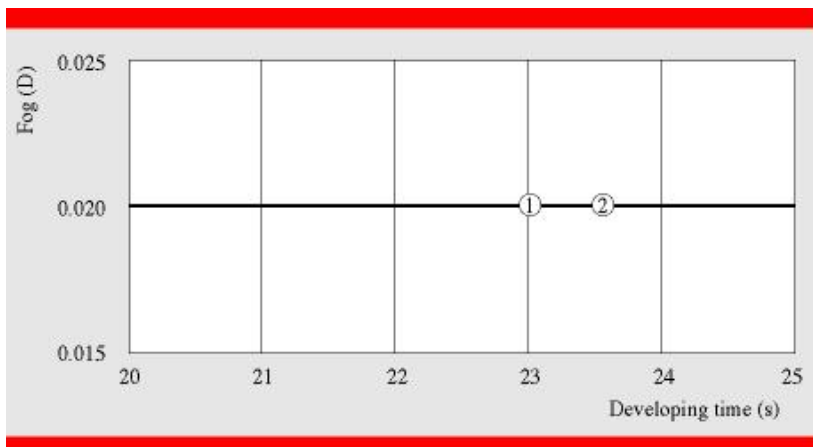
- Average gradient/time curve



Development temperature

- ① 38 °C
- ② 35 °C

- Fog/time curve



Development temperature

- ① 38 °C
- ② 35 °C

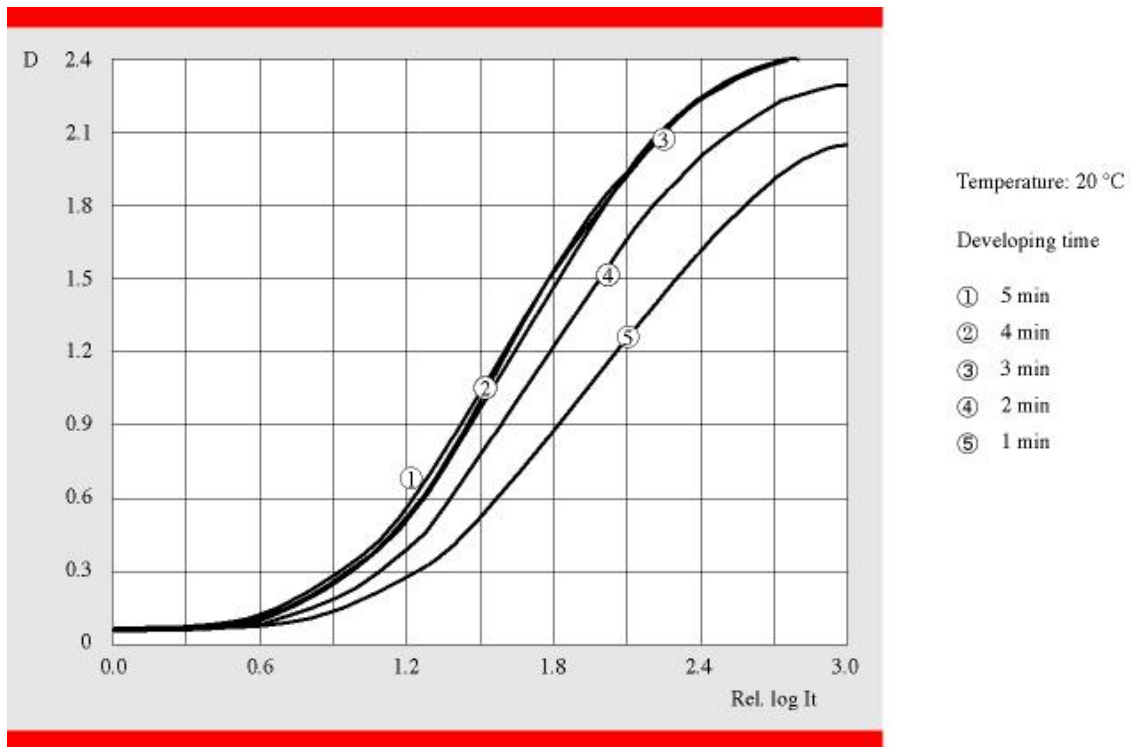
Processing in tray

Developer: G 74 c at 20 °C/68 °F, for 1 to 5 minutes.

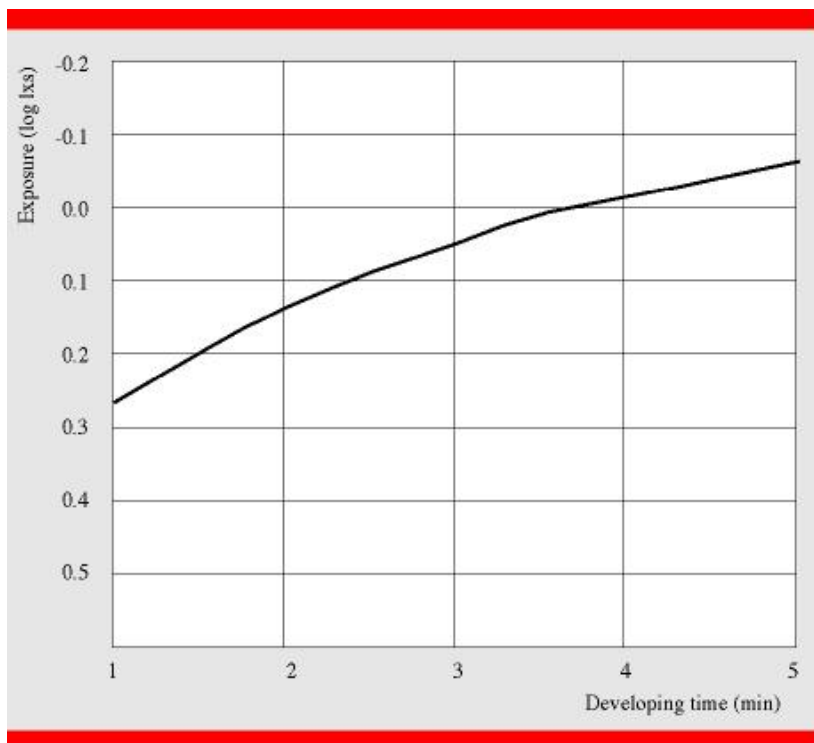
Fixer PFIX at 20 °C/68 °F, for 30 s.

Wash thoroughly, preferably in running water.

- Characteristic curves



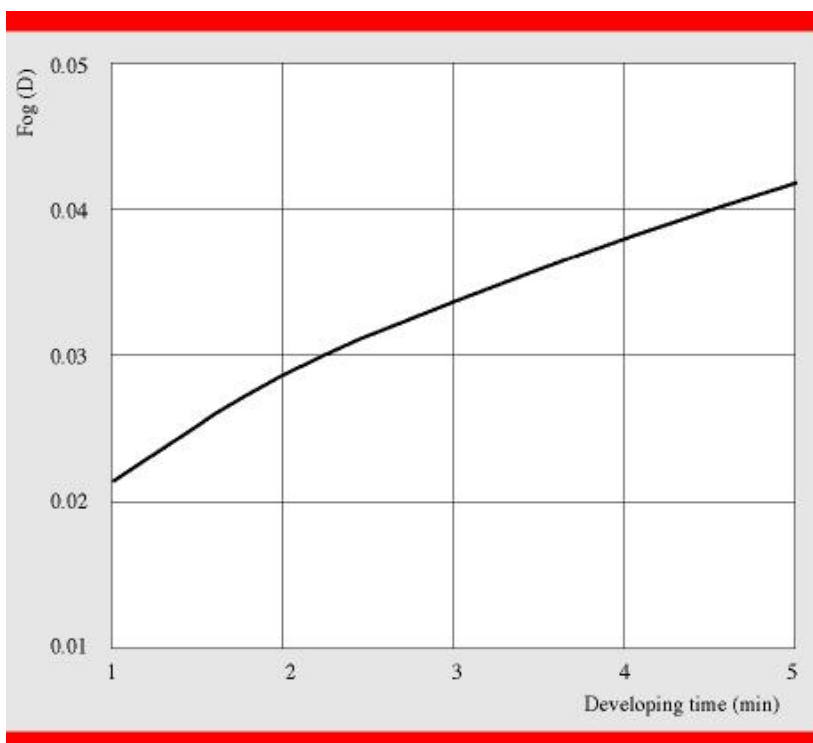
- Exposure/time curve



- Average gradient/time curve



- Fog/time curve



Storage

Avitone P1p and P3p films have to be kept in a dry and cool place, preferably at a temperature between 2 °C/36 °F and 10 °C/50 °F. The film should be taken out of the cool room at least 30 minutes before use.

Keeping the film in deep freeze (at -10 °C/+14 °F) considerably delays the ageing process and guarantees a longer life. Film which has been kept in deep freeze has to remain in room temperature for at least 8 hours before use.

■ Assortment

Avitone P1p

Size		Spool/Winding/Perforation	Order code
126 mm x 213,5 m	5 in x 700 ft	AN397 – EI – NP	3FDW7
240 mm x 76 m	9 7/16 in x 249 ft	AH897 – EI – NP	3HCAB
240 mm x 152 m	9 7/16 in x 500 ft	AM897 – EI - NP	3FDV5

Avitone P3p

Size		Spool/Winding/Perforation	Order code
24 x 24 cm	9 7/16 x 9 7/16 in	100 sheets	3E7OV
24 x 26.2 cm	9 7/16 x 10 5/16 in	100 sheets	3E7QZ
25.4 x 25.4 cm	10 x 10 in	100 sheets	3E7T6

* For all other sizes, please contact your local Agfa representative.