

## FOMAPAN 100 Classic

### BLACK-AND-WHITE NEGATIVE FILM

#### In general

FOMAPAN 100 Classic is a panchromatically sensitized, black-and-white negative film designed for taking photographs. The film meets high requirements for low granularity, high resolving power and contour sharpness and a wide range of halftones. FOMAPAN 100 Classic has a nominal speed rating of ISO 100/21°, but due to its wide exposure latitude the film gives good results even when overexposed by 1 EV (exposure value) (as ISO 50/18°) or underexposed by 2 EV (as ISO 400/27°) without any change in processing, i.e. without lengthening the development time or increasing the temperature of the developer used.

To make prints or enlargements, Extrabrom- and Fomaspeed-type enlarging papers are recommended; however, all sorts of black-and-white enlargement papers can be used.

#### Speed

ISO 100/21°, 21° ČSN

#### Schwarzschild effect

Exposure (seconds)	1/1000-1/2	1	10	100
Lengthening of exposure	1x	2x	8x	16x
Correction of aperture number	0	-1	-3	-4

#### Processing

##### Safelighting

Total darkness or infrared light; for a short time an indirect safelighting can be used (using e.g. an Agfa 108 filter with 15 Watt lamp at a distance of not less than 75 cm).

##### Development

FOMAPAN 100 Classic can be processed in all common negative developers. Recommended development times are shown in the table below (the development times are related to development in a spiral developing tank - agitation or turning over continuously during the first 30 seconds, then during the first 10 seconds in every minute). In this way, medium-contrast negatives can be obtained.

Developer	Development time (minutes)	
	20 °C	30 °C
Fomadon LQN (1+10)	7-8	2,5
Fomadon R09 (1+40)	6-7	-
Fomadon P	7-8	4
Fomadon Excel	5-6	1,5
Kodak Xtol	5-6	1,5
Ilford Microphen	5-7	2
Ilford Perceptol	8	3
Ilford ID 11 stock / Kodak D76	6-7	3
Tetenal Emofin Liquid	4-5	-

When the development time has elapsed, the film is recommended to be shortly rinsed in distilled water or dipped in a 2 % acetic acid solution for 10 seconds.

##### Fixing

At a temperature ranging from 18 to 25 °C for 10 minutes in any common type of an acid fixing bath, or for at least 3 minutes in Fomafix rapid fixer.

##### Washing

The film should be washed in running water: for 30 minutes and 15 minutes the temperature of water being below 15 °C and over 15 °C respectively.

It is recommended to finish the processing with the film being rinsed in distilled water, or dipped in a wetting agent solution.

##### Storage

Unexposed films should be stored in the original packaging in a cool, dry place (temperature ranging from 5 to 20 °C, relative humidity from 50 to 60 %), out of reach of harmful vapours, gases and ionizing radiations. Films stored in a refrigerator and a freezer should be acclimatized to room temperature for approx. 2 and approx. 6 hours respectively. Exposed films should be processed as soon as possible.

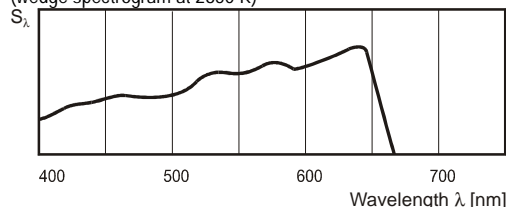
##### Packaging

FOMAPAN 100 Classic is available in the following sorts:

- 120 rollfilm 60 mm wide, exclusively on a 120 spool
- double-edge perforated 35 mm film in 135-36, 135-24 and 135-12 cartridges for 36, 24 and 12 exposures 24 x 36 mm; bulk lengths of 17, 30,5 and 50 m in a darkroom packaging
- sheet film (for large-format cameras) sized: 9 x 12, 10 x 15, 12 x 16,5 13 x 18 and 18 x 24 cm in a box of 50 sheets.

Other sizes are subject of an agreement with the manufacturer.

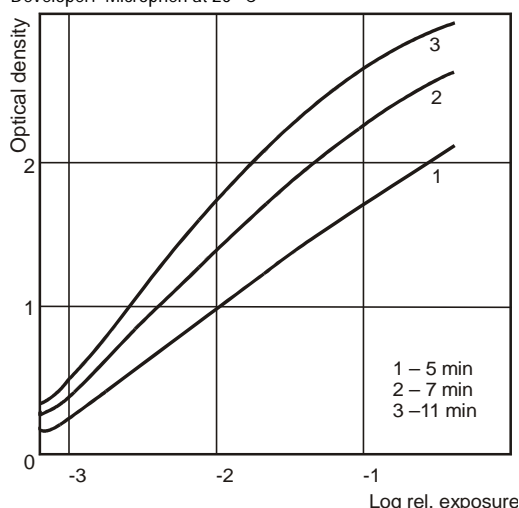
Relative spectral sensitivity (wedge spectrogram at 2850 K)



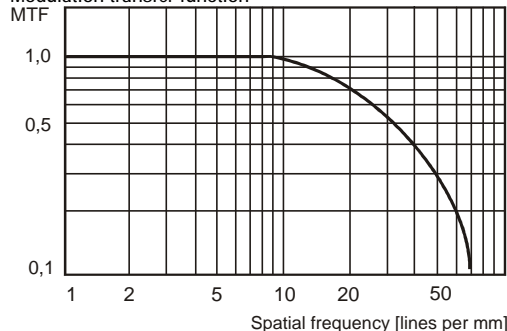
#### Characteristic curves

Exposure: Daylight (5500 K), 1/20 s

Developer: Microphen at 20 °C



#### Modulation transfer function



#### Resolving power

110 lines per mm

#### Granularity

RMS = 13,5 (Microphen at 20 °C, developed to  $\bar{G} = 0,6$ .)

Measured at D = 1,0.

#### Base

The following bases are used for manufacturing the particular sorts of the film:

- 120 rollfilm - a bluish polyester base 0,1 mm thick, furnished with a matted colour backing which will decolorize during processing. The backing has anti-halation and anti-curling properties and prevents the incidence of Newton rings during enlarging.
- 35 mm film - a gray or gray-blue cellulose triacetate base 0,135 mm thick,
- sheet film - a clear polyester base 0,175 mm thick furnished with a matted colour backing which will decolorize during processing. The backing has anti-halation and anti-curling properties and prevents the incidence of Newton rings during enlarging.



The product has been produced and marketed in conformity with a quality system according to the international standard ISO 9001.