

FOMAPAN R

BLACK-AND-WHITE REVERSAL FILM

In General

FOMAPAN R is a panchromatic sensitized black-and-white reversal film intended for taking black-and-white transparencies and/or making movies. From the shape of the characteristic curve it is evident that the film is characterized by very good differentiation of fine gray shades both in areas of highlights and shadows. In the areas of normal exposures, the linear part of the characteristic curve shows the gradation of 1,1. The spectral sensitisation of FOMAPAN R is designed for to true transfer colour tones into the gray scale when exposed in daylight, and simultaneously to make full use of the film speed when exposed in artificial light.

Due to a very efficient antihaloe layer, situated between the base and emulsion layers, the film features very good resolving power and high contour sharpness. The antihaloe layer will decolorize during processing.

Speed

The film has a nominal speed rating of ISO 100/21° when processed in R-100 Process. Other processes can cause deviations from the nominal film speed. It is, therefore, recommended that the real film speed be checked by trial tests in such cases.

Processing in R-100 Process

	Process steps	Time (minutes)	Temperature (°C)
1	Firs development FOMADON LQR 1+10	9 – 10*	20 ± 0,5
2	Washing (running water)	10	20 ± 3
3	Bleaching (FB-2)	5	20 ± 0,5
4	Washing (running water)	5	20 ± 3
5	Cleaning bath	3	
6	Washing (running water)	5	20 ± 3
7	Second exposure (or reversal bath)	5	
8	Washing (running water – after the reversal bath only)	10	20 ± 3
9	Second development FOMADON LQR 1+10	9	20 ± 0,5
10	Washing (running water)	10	20 ± 3
11	Fixing (FU-5)	9	20 ± 3
12	Washing (running water)	30	20 ± 3
	Total processing time (excluding drying)	100–102 (110–112)**	

Note:

*development time depends on the alternatives of processing procedure used

** information in parentheses is valid in case of reversal bath application

Safelighting

FOMAPAN R should be processed in total darkness or under infrared light until including the processing step 6 (washing before the second exposure). If, however, an illumination for reference or short-term orientation before this processing step is necessary, it is possible to use a safelight fitted with Agfa 108 filter, 15 Watt lamp, indirect light, at a distance of at least 150 cm from the workplace.

Storage

Unexposed films should be stored in the original packaging in a dry and cool place (at temperatures ranging from 5 to 21 °C and relative humidities ranging from 40 to 50 %), out of reach of harmful vapours, gases and ionizing radiation. Films stored in a refrigerator and a freezer should be adjusted to room temperature before using for about 2 and 6 hours respectively.

Exposed films should be processed as soon as possible. In cases this condition cannot be kept, the films should be stored at lower temperatures (4 bis 18 °C) and relative humidities less than 60 %, out of reach of harmful vapours, gases and ionizing radiation.

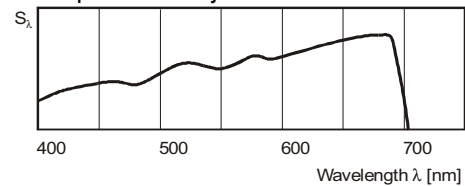
Processed films should usually be stored at temperatures up to 21 °C and relative humidities ranging 40 bis 60 %. For a long-term storage (e.g. in archives), special regulations of corresponding institutions should be adhered to.

Packaging

FOMAPAN R is available as:

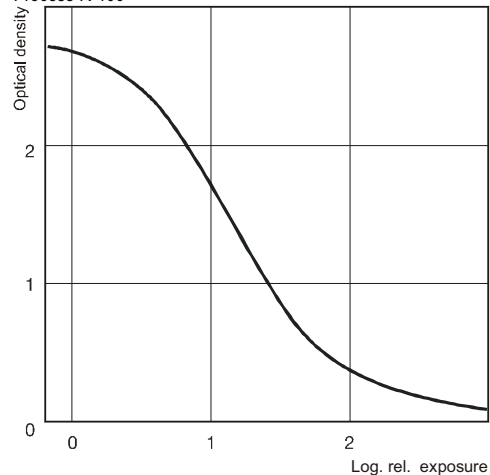
- one-edge perforated 16 mm film
- 2 x 8 mm film (standard)
- 2x Super 8 mm film (DS 8)
- both-edge perforated 35 mm film in 135-36 cartridge for 36 slides of 24x36 mm or as bulk length goods in customary lengths.

Relative spectral sensitivity

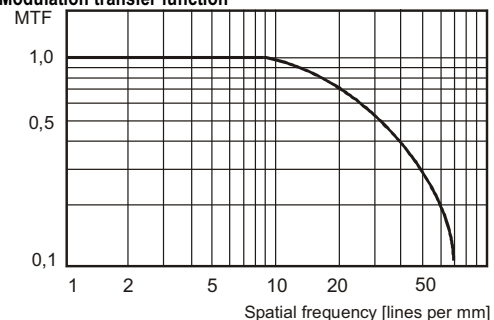


Characteristic Curves

Exposure: Daylight (5500 K), 1/20 s
Process R-100



Modulation transfer function



Resolving power

115 lines per mm

Granularity

RMS = 13.0. Measured at $\bar{G} = 1.1$. Process R-100.

Base

FOMAPAN R is usually produced on a cellulose triacetate safety film base 0.125 mm thick or on a polyester film base of the same thickness when higher demands concerning mechanical resistance and dimensional stability are made on the film.