

# FOMAPASTEL MG – NEW!

SPECIAL BLACK-AND-WHITE VARIABLE-CONTRAST ENLARGING FB PHOTOGRAPHIC PAPER

## In general

FOMAPASTEL MG is a unique black and white paper made on a baryta paper base (FB).

Its contrast can be varied in a large extent from extra soft up to ultra hard using colour correction filters. However, due to the nature of this type of paper, it is rather advisable to set the filtration for higher contrast grades.

The darker colour of the base predetermine the preference for more contrast image template for exposure on this type of b/w paper. FOMAPASTEL MG features a low to medium optical sensitivity level, which enables the application of both enlarging and contact copying methods. A digital negative image on transparent (ink-jet) foil can also be used as a template for contact copying or enlarging. The resulting b/w image with the coloured base provides very impressive results for suitable subjects.

This special type of paper is mainly intended for artistically expressive photography and various photo concepts, themes and genres (portraits, still life, landscape, abstraction ..), styles, concepts („vintage“, pop-art, the photograms and chemigrams, etc.).

FOMAPASTEL MG is made using a silver chlorobromide emulsion, which gives a neutral tone to the developed silver picture and is characterized by a deep black.

FOMAPASTEL MG is manufactured on a double weight (DW) baryta paper base (FB) in a semi-glossy surface and in six colours: cyan, magenta, yellow (CMY) and red, green, blue (RGB).

## Packaging

FOMAPASTEL MG is manufactured and supplied in the following format composition: 8x10 inch., 30.5 x 40.6 cm a 50.8 x 61 cm in a single pack of 10 sheets.

## Safelighting

FOMAPASTEL MG is orthochromatic sensitized photo paper so if you work with it you should use safety lighting different from common black and white photo paper. It is routinely processed at indirect safety lighting with wavelength of 625 nm and higher, corresponding colour of safety illumination is orange-red or red.

## Important:

Due to its high sensitivity, the processed paper must be exposed to this lighting only for the time necessary for its processing. Time of exposure and a distance of the processed paper from the illumination source should be tested.

## Exposure

FOMAPASTEL MG can be exposed in all types of enlargers and printers equipped with tungsten (opaline) or tungsten halogen lamps or LED bulb. Devices with a special colour mixing head are particularly suitable for multi-contrast papers. Other enlargers can also be used, but separate correction filters should be inserted during exposure.

## Contrast control

The contrast can be continuously varied from extra soft (contrast grade 0) to ultra hard (contrast grade 5). The following methods and devices are recommended for contrast control:

- standard sets of filters for variable-contrast papers (e.g. Foma Variant Filters, Ilford Multigrade Filters, etc.)
- magenta and yellow filters in colour mixing heads
- special enlarging heads for variable-contrast papers
- colour printing filters (yellow and magenta)

Filtrations with colour printing filters or colour mixing heads:

Contrast grade	0	1	2	3	4	5
AGFA*	120 Y	30Y	20M	130M	300M	400M
KODAK*	80 Y	30Y	10M	60M	120M	200M
DURST**	60 Y	30Y	10M	40M	90M	130M
MEOPTA**	60 Y	30Y	10M	30M	100M	180M

\* printing filters

\*\* colour mixing head

## Processing

FOMAPASTEL MG can be processed manually in trays. Common positive developers are suitable. With regard to the special nature of this paper, energetic neutral or contrast developers are most suitable. Of the FOMA developers, FOMA GD-L liquid developer concentrate is the most suitable for this type of paper. It is also possible to use other types of positive developers: liquid developer concentrate Fomatol LQN or powdered Universal developer.

Among other developers, we recommend Fotospeed DV 10, Moersch SE 20, Rollei RHC High Contrast, Adox Adotol Constant, Ilford Multigrade, etc. For fixing, it is possible to use common acid fixers or rapid fixers - Fomafix, Ilford Hypam, etc.

## Manual processing in trays

Processing step	Processing bath	Time	Temperature [°C]
Development	Foma GD-L (1+3)	50–80 s	20
	Fomatol LQN (1+7)	40-60 s	
Stopping	2 % acetic acid	7-10 s	20
	or Fomacitro (1+19)	7-10 s	
Fixing	Fomafix (1 + 5)	3 min.	20
	Fomafix P	5 min.	
Washing	running water	35 min.	above 12
		45 min.	below 12

## Important Notice:

For consistent image results, the processing conditions, especially temperature and development time, must be as identical as possible. Prolonging of this time beyond the upper tolerance limit of the optimal range or increasing of the developer temperature (without below mentioned compensation) causes a loss of the colour saturation and brilliance of the final images. As a result of this deviation these colour areas can show a (specific) inhomogeneous character in less exposed and unexposed areas of the photos.

## Dependence of processing time on temperature during manual processing (20°C)

Temperature [°C]	Factor
18 °C	1.3
20 °C	1.0
22 °C	0.8
24 °C	0.6

## Drying:

FOMAPASTEL MG is recommended to be dried freely laid at room temperature, or by hot air in maximum of 80°C and subsequently pressed or dried stretch at maximal temperature of 35° C.

## Toning

FOMAPASTEL MG can be toned using a direct toning method (the one-bath one, e.g. by Fomatoner Indigo), or an indirect toning method (the two-bath one, e.g. Fomatoner Sepia). That way a two-colour image of the photos is practically always created. For a standard process, the indirect method is recommended. The brown image tone is particularly very popular, being obtained using Fomatoner Sepia Set. By changing the temperature of the toning bath, a wide scale of shades from light yellow-brown to dark-brown or violet-brown can be obtained.

Temperature (°C)	Image tone
up to 20	light, yellow-brown
20 - 30	warm, neutral-brown
above 30	dark-brown to violet-brown

A blue tone can be obtained using the Fomatoner Indigo Set. The resulting image tone depends on dilution, temperature and toning time.

**Technical data (Ilford Multigrade filters for contrast control)**

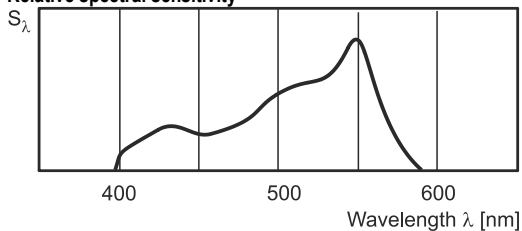
Filter	Contrast grade	ISO P speed	ISO R range	Lengthening factor ( $t_{rel}$ )
00	special soft	80	160	2,5
0	extra soft	80	130	2,5
1	soft	80	110	2,5
-	special	200	100	-
2	special	80	90	2,5
3	normal	80	70	2,5
4	hard	40	60	5
5	ultra hard	40	50	5

Exposure for filters 00 – 3 is the same; for filters 4 – 5 it should be doubled

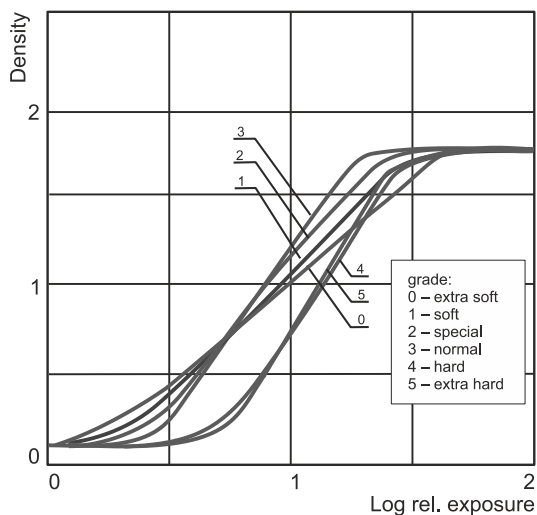
**Technical data (Foma Variant filters for contrast control)**

Filter	Contrast grade	ISO P speed	ISO R range	Lengthening factor ( $t_{rel}$ )
2xY	extra soft	130	135	1,5
Y	soft	140	120	1,4
-	special	200	100	-
M1	special	140	90	1,4
2xM1	normal	100	80	2
M2	hard	80	65	2,5
2xM2	ultra hard	45	55	4,5

**Relative spectral sensitivity**



**Sensitometric curves**



**Storage**

FOMAPASTEL should be stored in an intact original packaging in a dry, cold place (temperatures of up to 5–20°C and relative humidity ranging 40–60 %), out of reach of harmful vapours, gases and ionizing radiation. The elementary expiry time (2 years) can be extended by storing at low temperatures (5–12 °C).

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