

## TECHNICAL INFORMATION

# ILFOBROM GALERIE FB

## PREMIUM QUALITY GRADED PHOTOGRAPHIC PAPER ON A DOUBLE WEIGHT FIBRE BASE

ILFORD ILFOBROM GALERIE FB is a traditional, graded, black and white photographic printing paper on a double weight 255g/m<sup>2</sup> fibre base. Prints made on this paper have deep, rich blacks, brilliant whites and an excellent tonal rendition. ILFOBROM GALERIE FB has a bright white base tint, which will not yellow with prolonged washing, and a neutral image colour in all viewing conditions, giving outstanding quality and excellent overall print appearance. These qualities can be relied upon from print-to-print and batch-to-batch.

ILFOBROM GALERIE FB is suitable for a wide range of applications that require a fine quality printing paper, such as, archival prints for museums, collections and exhibitions; prestige applications which focus attention on both the look and the feel of the print.

ILFOBROM GALERIE FB paper is available in glossy surface in four equally spaced grades, 1–4. It is also available in a matt surface in three equally spaced grades 1–3. It is packed in popular photographic sheet formats and quantities.

**EXPOSURE**

ILFOBROM GALERIE FB is designed for use with all enlargers. When using colour enlargers, always ensure that the paper is exposed using white light without filtration.

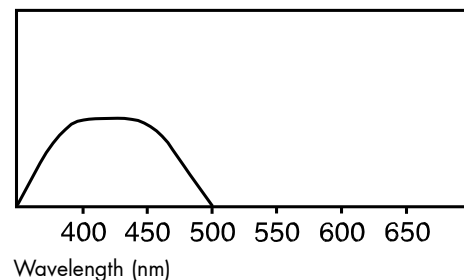
**Safelight recommendations**

ILFOBROM GALERIE FB can be used with virtually all safelights for black and white papers. The ILFORD safelights are especially recommended, however, as they generally allow darkrooms to be brighter, but completely safe, for Ilfobrom Galerie FB and many black and white papers.

ILFORD safelights are the ILFORD SL1 darkroom safelight or the ILFORD 902 (light brown) safelight filter fitted in a darkroom lamp (for example, the ILFORD DL10 or DL20). A 15W bulb is recommended with these safelights.

For direct lighting, do not expose the paper to the safelight for more than 4 minutes, and the distance between the paper and the safelight should be a minimum of 1.2m/4ft. However, Ilfobrom Galerie FB is extremely resistant to safelight fogging.

Other filters can be used, for example, the Kodak OC and the Agfa-Gevaert G7, or the Philips PF710 safelamp.

**SPECTRAL SENSITIVITY****Wedge spectrogram to tungsten light  
(2850K)**

**Contrast range**

ILFEBROM GALERIE FB paper is available in four equally spaced contrast grades, sufficient to accommodate most negatives. The chart gives the ISO range figures (ISO standard 6846-1992) for ILFEBROM GALERIE FB. These figures give a guide to selecting the appropriate grade of paper for a given effective negative density range.

**ISO range**

Grade	1	2	3	4
Range (R)	130	110	90	70

The above values are representative of those obtained when dish/tray processing the paper to ILFORD recommendations.

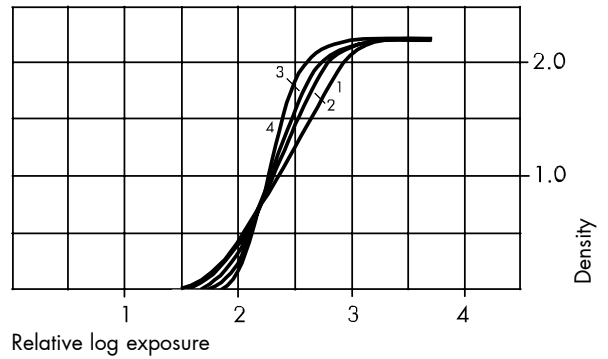
ISO range figures may be helpful to printers who have some means of measuring the effective density range of the image as projected on the enlarger baseboard – such as with a photometer. As an example, for a negative with an effective density range of 1.22 log exposure units, multiply this figure by 100 and choose the nearest ISO range figure from the table – in this case 120. Try printing this negative on grade 1 Ilfobrom Galerie FB paper.

**ISO speed**

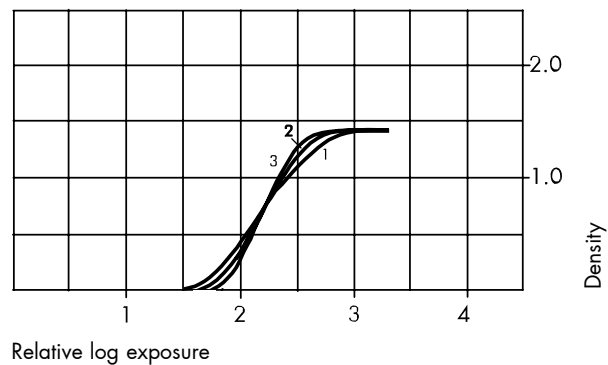
ILFEBROM GALERIE FB has a medium to high paper speed, which ensures short exposure times but is not difficult to control.

ILFEBROM GALERIE FB grades 1-4 have a paper speed of ISO P400. This value is representative of that obtained when dish/tray processing the paper to ILFORD recommendations in ILFORD PQ UNIVERSAL developer.

**Characteristic curves**



ILFEBROM GALERIE FB glossy paper grades 1 to 4. Developer: PQ UNIVERSAL or MULTIGRADE diluted 1+9. Development: 2 minutes at 20°C/68°F.



ILFEBROM GALERIE FB matt paper grades 1 to 3. Developer: PQ UNIVERSAL or MULTIGRADE diluted 1+9. Development: 2 minutes at 20°C/68°F.

**DISH/TRAY PROCESSING**

ILFOBROM GALERIE FB is processed in the same way as other fibre based papers. Full details on processing fibre based papers are given in the fact sheet 'Processing B&W paper – FB papers'.

**Note** Photographic chemicals are not hazardous when used correctly. Always follow the health and safety recommendations on the packaging. Photochemicals material safety data sheets containing full details for the safe handling, disposal and transportation of ILFORD chemicals are available from ILFORD.

**Processing summary** (intermittent agitation)

ILFORD chemical	Dilution	°C/°F	Time (min:sec)
<b>Development</b>			
MULTIGRADE	1+9	20/68	1:30–3:00
or MULTIGRADE	1+14	20/68	2:00–5:00
or BROMOPHEN	1+3	20/68	1:30–3:00
or PQ UNIVERSAL	1+9	20/68	1:30–3:00
<b>Stop bath</b>			
ILFOSTOP	1+19	18–24/64–75	0:10
or ILFOSTOP PRO	1+19	18–24/64–75	0:10
<b>Fixation</b>			
ILFORD RAPID FIXER or HYPAM	1+4	18–24/64–75	1:00
ILFOFIX II	stock	18–24/64–75	3:00
<b>Washing</b>			
Fresh, running water	–	Above 5/41	60:00

**Development**

See the 'Processing summary' for development recommendations.

On correctly exposed prints with MULTIGRADE developer 1+9, the image will begin to appear after 35 seconds. Development can be extended up to 6 minutes without any noticeable change in contrast or fog.

To give greater control during development, and for economy, the 1+14 dilution of MULTIGRADE developer can be used.

ILFOBROM GALERIE FB paper can also be processed in other high quality dish/tray developers.

**Stop bath**

See the 'Processing summary' for stop bath recommendations.

A stop bath stops development immediately, reduces the risk of staining and will extend the life of the fixer bath.

The use of a stop bath is strongly recommended.

**Fixation**

See the 'Processing summary' for fixing recommendations.

The use of a hardening fixer is not recommended as it reduces washing efficiency. ILFORD RAPID FIXER, ILFORD HYPAM and ILFOFIX II are non-hardening fixers.

There is no benefit in extending fixation beyond the recommended time; some loss of print quality might be seen when long fixing times are given due to image etching.

**Washing**

See the 'Processing summary' for washing recommendations.

**Drying**

A final rinse in ILFORD ILFOTOL, diluted 1+200 with water, will aid even and rapid drying.

After washing, squeegee prints on both sides to remove surplus water. Prints can be clipped back-to-back to minimise curl and air-dried at room temperature, or glazed/ferrotyped or heat-dried.

**OPTIMUM PERMANENCE**

The standard fixing and washing recommendations will give excellent print permanence for all commercial needs. When optimum permanence is needed, perhaps for archival storage of prints, the following fixing and washing sequences at 18–24°C/65–75°F (including wash water) are recommended using ILFORD WASHAID. Do not add a hardener to the fixer. Be careful not to exceed the capacity of the fixer and not to extend the fixing time as both these make washing more difficult.

**Optimum permanence sequence**

Fixation	ILFORD RAPID FIXER (1+4) or HYPAM (1+4) intermittent agitation	1min  1min
First wash	Fresh, running water	5min
Washing aid	ILFORD WASHAID (1+4) intermittent agitation	10min
Final wash	Fresh, running water	5min

**Optimum permanence sequence with selenium toner**

Fixation	ILFORD RAPID FIXER (1+4) or HYPAM (1+4) intermittent agitation	1min  1min
Toning	Selenium toner diluted with working strength ILFORD WASHAID instead of water, intermittent agitation	*min
Rinse	ILFORD WASHAID (1+4), intermittent agitation	10min
Final wash	Fresh, running water	30min

\* Tone the print for the appropriate time to achieve the depth of colour needed.

**FINISHING**

ILFOBROM GALERIE FB responds in the same way as other fibre base papers to the usual techniques of toning, chemical reduction and retouching. It can be mounted using the standard techniques for fibre base papers.

**STORAGE****Unprocessed paper**

Store unused ILFOBROM GALERIE FB paper in a cool, dry place in its original packaging. Avoid conditions of high temperature and/or high humidity. ILFOBROM GALERIE FB will keep in excellent condition for up to three years when stored as recommended.

**Prints**

ILFOBROM GALERIE FB prints which have been processed as recommended in this leaflet will have a more than adequate storage life for most purposes. Print life will be shortened, however, in adverse storage conditions, or if the print is exposed to oxidising gases.

It is recommended that prints made for display are toned to protect them from the oxidising gases that are found in many environments. Selenium toner is recommended as it has little effect on the image colour of ILFOBROM GALERIE FB, but other protection methods can be used including sulphide toning, silver image stabilisers and laminating. ILFORD ILFOGUARD laminating and encapsulating films are recommended.

A wide range of fact sheets is available which describe and give guidance on using ILFORD products. Some products in this fact sheet might not be available in your country.