# TECHNICAL INFORMATION BROMIDE F

# BROMIDE - GRADED BLACK AND WHITE PAPER, ON A FIBRE BASE.

For lovers of the traditional qualities of graded fibre based papers, the characteristics of Kentmere Bromide paper gives superb, rich natural blacks, a brilliant base white and outstanding tonal rendition. Kentmere Bromide is an ideal choice where the outstanding qualities of a traditional graded paper are favoured.

# **Product Description**

BROMIDE Papers feature a conventional fibre base in double weight, coated with a neutral tone bromide emulsion. Available with a Gloss surface only - in contrast grades 1 - 3.

# Surfaces

• **Glossy:** The traditional unglazed glossy surface is particularly suited to portrait and exhibition print work. A very high gloss can be achieved by standard glazing techniques.

## Packaging

Kentmere black and white photographic papers are packed in a black plastic bag, then an outer cardboard box or envelope and finally sealed with a label and tape. The plastic bag helps protect the paper from humidity and fumes as well as being light proof.

Although the black plastic bag is light proof, we would recommend that it is also returned to the outer cardboard container before exposure to white light as small holes can develop in the plastic bag with use.

## Storage

All Kentmere black and white photographic papers should be stored in their original packaging, including the black plastic bag. The plastic bag protects the paper from harmful darkroom fumes and humidity.

Ideally the paper should be stored in a cool dry environment preferably at temperatures below 20°C.

For prolonged storage, a freezer can be used. In either case, allow sufficient time for warming up and do not allow condensation to form on the paper.

# Paper Structure

## Paper Base (double weight)

The double weight paper is 240 g/m<sup>2</sup> coated on the front side with 36 g/m<sup>2</sup> of baryta giving a base weight of approximately 276 g/m<sup>2</sup> and a thickness of approximately 260  $\mu$ m.

## **Coated** emulsion layer

The light-sensitive silver halide emulsion layer has a silver content of approximately  $1.7 \text{ g/m}^2$ . This is covered with a gelatine supercoat which protects the emulsion from stress fogging and physical damage and also contains a small amount of developing agent.

# **BROMIDE FB**

Supercoat layer Emulsion layer
Baryta layer
Paper base

(Not to scale, for information only)

# Sensitivity

ISO Paper Speed (ISO speed to ISO 6846 - 1992)

Bromide grade	1	ISO P250
	2	ISO P250
	3	ISO P250

#### Exposure

BROMIDE is designed for use with tungsten or tungsten halogen light sources.

Contrast range (ISO range	e to ISO 6846 - 1992)
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Bromide grade	1	ISO P100
	2	ISO P80
	3	ISO P60

## Maximum density

BROMIDE can achieve the following maximum density :-

Glossy 2.00

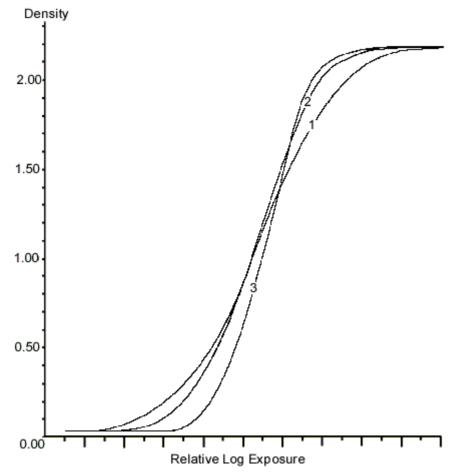
Results achieved using ILFORD Multigrade Developer at 1 + 9 at 20°C, as recommended under processing instructions.

A small amount of production tolerance is included, but the density achievable also depends on paper age, storage conditions and processing.

Other developers and fixers should give comparable results.

#### Density/Characteristic curves

(Glossy surface)



Results achieved using ILFORD Multigrade Developer at 1 + 9 at 20°C as recommended under processing instructions. Other recommended developers and fixers should give comparable results.

## Safelighting

Bromide graded papers have conventional bromide emulsions, which can be used under standard safelights for non VC type printing papers.

Good darkroom practices should be adopted by keeping safelight exposure to a minimum and returning unused paper to the original packaging.

Box/lantern type safelights using glass filters should only be used with a 15 W bulb or less and should be positioned at least 1 metre from the paper.

Safelight filters which are suitable for use with BROMIDE are :-

ILFORD 904, ILFORD 902 and Kodak OC or 1A.

Fluorescent safelights are also safe and suitable, these give a brighter, overall more even lighting. Fluorescent safelights should be positioned at least 1.5 metres from the paper.

Other safelights can be used, but tests should always be carried out first.

#### PROCESSING

Traditional Bromide Papers can be processed in conventional developers such as ILFORD Multigrade or ILFORD Bromophen developers together with ILFORD Hypam or ILFORD Rapid fixers with excellent results. Equivalent products from other manufacturers should give similar results. The below table shows recommended dish processing conditions for use with ILFORD Multigrade developer and ILFORD Hypam/Rapid fixer. If using another manufacturer's chemistry, refer to their instructions for recommended processing conditions to achieve similar results.

Chemistry	Dilution	Temp.	Time (seconds
ILFORD Multigrade Developer	1 + 9	20oC	90 - 180 s
ILFORD Multigrade Developer	1 + 14	20oC	120 - 300 s
ILFORD Ilfostop bath	1 + 19	20oC	10 s
ILFORD Hypam or Rapid Fixer	1 + 4	20oC	60 s
Wash in running water	_	-	60 minutes

# Drying

BROMIDE papers can be dried using any standard fibre base paper drying methods, these include;

Atmospheric drying, either at room temperature or using warm air, having removed excess surface water using a suitable print squeegee.

Prints will dry flatter if hung back to back in pairs.

Print drying racks or plastic mesh screens can also be used to hold prints flat during drying.

Rotary glazing/drying drums or flat bed glazing/drying presses.

The use of a wetting agent in the final washing will help to produce a better contact between the print face and the heated glazing surface.

If using a heated glazing surface for drying prints, the back of the print should be in contact to the glazing surface. Excessive temperatures should not be used, as this can cause the emulsion to melt and adhere to the glazer blanket.