



The Fineprint Range

Technical Data Sheet

Fineprint VC

Three unique alternatives for the discerning image maker seeking the aesthetic qualities of a fibre based paper, coupled with the convenience of a variable contrast emulsion.

Cool rich blacks, crisp bright whites and exceptional mid-tone detail characterise Fineprint VC Glossy and Finegrain. Kentmere's unique bromo-iodide technology, with its special construction, offers superior sharpness with separation in even the finest detail.

The range is now extended with Fineprint F.G. Warmtone. Warm rich whites and a subtle, warmer image rendition characterise this new paper, complemented by its Finegrain semi-matt surface.

All three surfaces respond superbly to many toning techniques allowing further manipulation of tone and contrast.

Whatever your needs, Fineprint VC is the perfect choice for portfolio, exhibition and commercial work where excellence is the criterion.

Product description

The Fineprint VC range consists of black and white enlarging papers with a traditional fibre base, coated with a variable contrast emulsion. Using standard colour filtration, contrast from grades 00 to 5 are achievable.

Surfaces

- Glossy: The traditional unglazed glossy surface is particularly suited to portrait, landscape and exhibition work. A very high gloss can be achieved by standard glazing techniques.
- Finegrain: A Semi-Matt surface coated on a Stipple / Lustre base paper.
- F.G. Warmtone: A new Warmtone Semi-Matt Finegrain surface, giving a warm, rich image with subtle creamy highlights.

Storage

All Kentmere black and white photographic papers should be stored in their original packaging, including the black plastic envelope. The plastic envelope protects the paper from harmful darkroom fumes and humidity. Ideally the paper should be stored in a cool dry environment preferably at temperatures below 68°F/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.

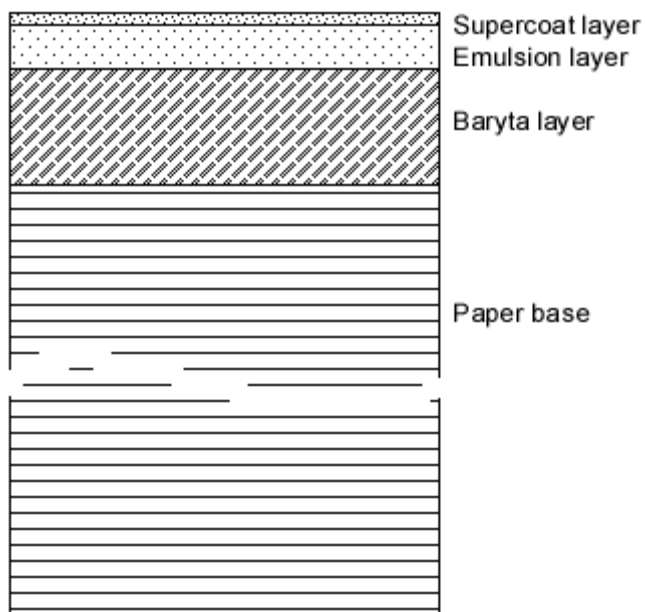
Paper Structure

Paper Base

The paper is 240 g/m² coated on the front side with 36 g/m² of baryta giving a base weight of approximately 276 g/m² and a thickness of approximately 260 μm.

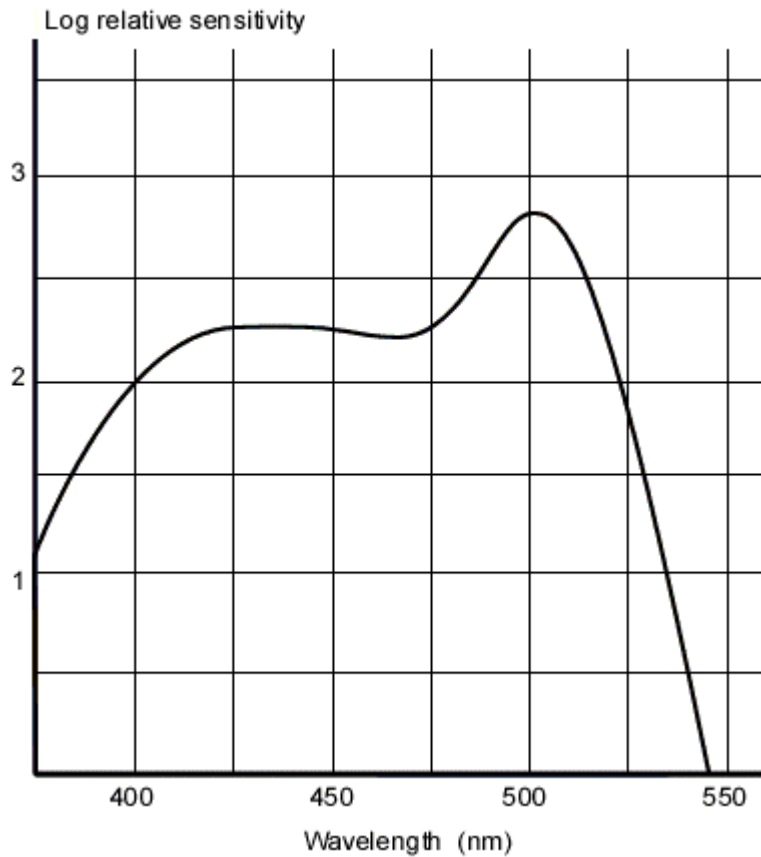
Coated emulsion layer

The light-sensitive silver halide emulsion layer has a silver content of approximately 1.5 g/m². 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.



(Not to scale, for information only)

Spectral Sensitivity



Sensitivity ISO Paper Speed

When exposed to unfiltered white light Fineprint VC has a speed of ISO P 640 and has a contrast of approximately grade 2.

When exposed using Ilford Multigrade filters grades 00 - 3 1/2 have the same speed (ISO P 320) and grades 4 - 5 require approximately twice the exposure (ISO P 160).

When exposed using the colour enlarger filter settings for matched exposures (see contrast control) grades 0 - 4 have the same speed (ISO P 320), grades 00 and 5 require approximately 1/3 of a stop more exposure (ISO P 250).

Exposure

Fineprint VC is designed for use with tungsten or tungsten halogen light sources. Cold light source enlargers can be used, but they may limit the contrast range achievable.

Contrast Control

Contrast as a range approximately equivalent to grades 00 to 5 is achievable from the Fineprint range by means of colour filters used in the enlarger. Proprietary filter sets such as Ilford Multigrade or Kodak Polymax are suitable, as are modular and automatic enlarger heads featuring proprietary filters; otherwise the magenta and yellow filters of colour enlarging heads can be used. Below are tables of enlarger colour filter settings recommended for use with the Fineprint range. Filter settings recommended by other manufacturers will also give a similar range of contrasts; there may be slight differences in grade spacings.

The contrast of the paper is continuously variable so that the grades are fixed only by the filter settings used, and thus fractional grade changes can be achieved.

Filters of colour enlargers from different manufacturers fall into three categories as follows:-

Durst: Dunco, Durst, Kaiser, Leitz.

Kodak: Beseler, De Vere, Chromega, Fujimoto, Jobo, LPL, Omega, Paterson, Vivitar.

Agfa: Agfa, Meopta.

Table A shows simply the filter settings for grade selection. Speeds of grades are not the same.

Grade	Durst	Kodak	Agfa
00	80Y	150Y	140Y
0	40Y	80Y	90Y
1	15Y	45Y	60Y
2	20M	10M	15Y
3	40M	45M	45M
4	60M	75M	75M
5	130M	130M	120M

When exposed with no filter, the paper gives a contrast of approximately Grade 2 and is of high speed.

Table B shows the combined filter setting which should be used if speed matching of grades 0 - 4 is required. Grades 00 and 5 approximatley 1/3 of a stop more exposure.

Grade	Durst	Kodak	Agfa
0	40Y	80Y	90Y
1	25Y + 20M	60Y + 15M	75Y + 15M
2	10Y + 45M	35Y + 50M	50Y + 40M
3	5Y + 50M	15Y + 70M	25Y + 65M
4	60M	5Y + 85M	5Y + 85M

Contrast range

Fineprint ISO Range

Filter	00	0	1	2	3	4	5
ISO Range	150	130	110	95	80	70	60

These figures represent an average of the achievable results. A small amount of production tolerance is included. Actual results achieved may differ depending on processing, paper age and storage conditions.

Maximum density

The Fineprint range will achieve the following maximum densities:

Glossy 2.20

Finegrain 1.60

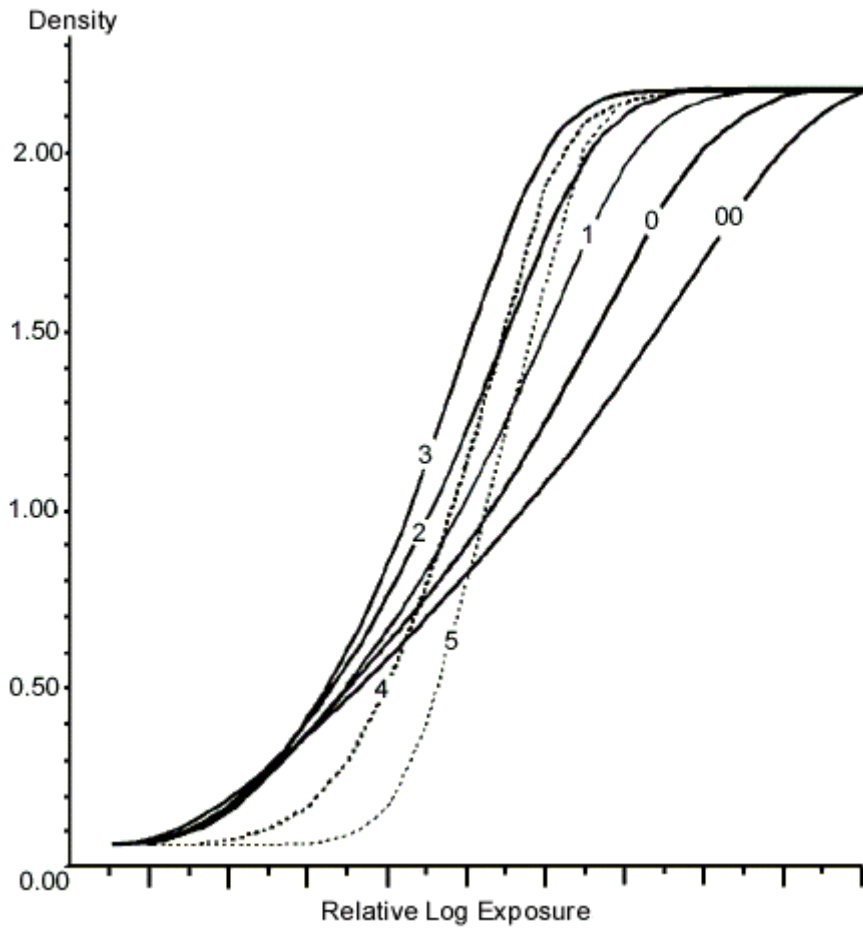
F.G. Warmtone 1.60

(the Finegrain surfaces contain matting agents which reduce the maximum density achievable)

Results achieved using Kentmere VC Select Plus Variable Contrast Developer at 1 + 12 at 68°F/20°C as recommended under processing instructions. Other recommended developers and fixers (see Processing) should give comparable results.

Density/Characteristic curves

(Glossy surface)



Results achieved using Kentmere VC Select Plus Variable Contrast Developer at 1 + 12 at 20°C as recommended under processing instructions. Other recommended developers and fixers (see Processing) should give comparable results.

Recommended Safelights

- Fineprint range papers have an orthochromatic emulsion; this requires a dark orange/brown or red safelight to be used. All variable contrast papers are more sensitive to safelights than conventional graded printing papers. Good darkroom practices should be adopted, 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. Filters which are suitable for use with Fineprint range papers are :-

Kodak OC or 1A, and Ilford 902.

Fluorescent safelights are also suitable, these give a brighter, overall more even lighting. Fluorescent safelights can produce a more evenly lit and pleasant working environment, but still be as safe as the conventional lantern type safelights. 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

To maximize d-max, grade spacing and tonal rendition standard developers such as Kodak Dektol, Clayton P20, Nacco Printol, Agfa Neutol Plus, Arista Premium Paper Developer, Ilford Multigrade Developer, etc. can be used.

Developing time should be 2-3 minutes based on the developer manufacturers' recommendation. A stop bath should be used for approximately 30 seconds. Fixing time will depend on formulation and dilution. Manufacturers' recommendations should be followed.

Drying

The Fineprint range 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.

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

Toning

The Fineprint range is recommended for all varieties of toning including Sepia, Selenium, Gold and Copper. However, as with all fiber base papers "additive" toners such as Prussian Blue are not recommended due to the difficulty of avoiding staining of the baryta base.

Prints to be toned should be thoroughly fixed and washed prior to any toning. Using a non-hardening fixer will help facilitate easier and more consistent toning. Baryta prints should be soaked in clean tepid water for 1 minute prior to toning.

Fineprint F.G. Warmtone is especially receptive to Lith Printing (Fineprint Glossy/Finegrain however or not compatible with Lith Developer)

Mounting

The Fineprint range of photographic papers can be mounted using any of the standard methods for fiber-base papers.

Cold adhesive films/cold mounting

- Hot adhesive films/dry mounting
- Spray adhesives such as:
3M Spray Mount Adhesive
3M Photo Mount Adhesive

Technical inquiries

Please address any technical inquiries to:
Kentmere USA
5124 Sunset Boulevard
Hollywood, CA 90027
<http://www.KentmereUSA.com>
800-292-6137 ext. 140

Replacements

KentmereUSA will replace or credit the value of any Kentmere papers if found by us to be defective in manufacture, our liability being confined to the value of the paper only. In all such cases, proof that the paper was defective would be required.