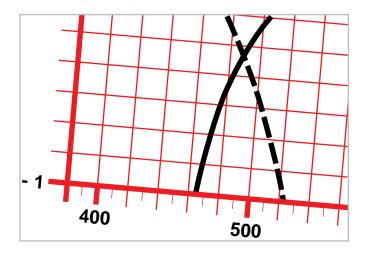
TECHNICAL DATA



AGFA BLACK-AND-WHITE PHOTOPAPERS with fixed contrast

- AGFA BROVIRA-SPEED
 Resin-coated base, neutral to cold black print tone
- AGFA RECORD-RAPID fibre-base, warm black print tone

Agfa RC/PE papers are black-and-white enlargement papers with an emulsion support (i. e. paper), coated with polyethylene on both sides. As a result, processing solutions cannot penetrate into the inner raw paper. The advantage is that the washing and drying periods are extremely short. Only RC/PE papers allow fast automatic processing.

Agfa fibre-base papers are black-and-white enlargement papers with traditional paper bases. Between the base and the emulsion there is a barium sulphate (i. e. baryta) coat which prevents the penetration of the emulsion into the inner raw paper. Fibre-base paper is particularly suitable if retouching or subsequent treatment is required.



Summary: RC and baryta papers

BROVIRA-SPEED

- Allround B/W enlargement paper on resin-coated base
- Speed to ISO 6846: EW H = P 400 EH = P 200
- Silver bromide emulsion
- Print tone: neutral to cold black
- White RC base with white toner
- Contrast grades: EW (0), W (1), S (2), N (3), H (4), EH (5)
- Surfaces: B 310 RC = glossy
 B 312 RC = semi-matt
- Developer substances incorporated
- Process in trays 60 seconds
 Development time at 20 °C / 68 °F
- Mechanical rapid process in roller transport machines
- Also suitable for activator process.

RECORD-RAPID

- Professional B/W enlargement paper on baryta base
- Speed to ISO 6846: W − H = P 250
- Silver chlorobromide emulsion
- Print tone: warm black (varied by developer type)
- White baryta-coated paper base with white toner
- Contrast grades: W (1), S (2), N (3), H (4)
- Surfaces: RR 1 = glossy, single-weight
 RR 111 = glossy, double-weight
- Process in trays 90 seconds
 Development time at 20 °C / 68 °F.

Packaging

The original packaging protects the papers from light and brief exposure to humidity and fumes.

Sheets are wrapped or welded in light-proof inside packaging, with an orange card wallet or lidded box outside.

Wide rolls are wrapped in compound packaging and packed in a corrugated cardboard lidded box.

The outside packaging alone does not provide adequate protection from light. Use both the inside and outside packaging for storing paper in opened packs.

Emulsion number

A product coding is printed on the label. It consists of the fiveplace ABC code. This is followed by the emulsion number and some code letters serving internal inspection purposes.

An internal order number starting with an X is printed on the second line.

The first code line should always be given in enquiries and complaints. The second code line provides helpful information for internal investigations.

Storage

Black-and-white photographic papers should be stored in a cool dry place away from harmful fumes. Temperatures below 20 °C / 68 °F and a relative humidity of 50 % to 60 % guarantee optimum quality over a very long time.

Open packs should be carefully re-closed after use (inside and outside packing), and should if possible not be left in darkrooms or other humid areas, but only in cool dry places.

The natural aging process of photographic papers is greatly retarded by refrigeration or deep freezing. However, the paper must then be taken out of the cold store a few hours before use, and brought up to room temperature.

The range

Following types, surfaces and contrast grades are available:

Paper types	Extra Soft (0)	Soft (1)	Special (2)	Normal (3)	Hard (4)	Extra Hard (5)
BROVIRA-	BROVIRA-SPEED					
B 310 B 312	х	x x	x x	x x	x x	х
RECORD-RAPID						
RR 1 RR 111		X X	x x	x x	X X	

The papers are supplied in all standard sizes up to 20×24 " (50.8 x 61 cm). For professional enlargements wide rolls (50" = 127 cm wide) are included in the range list.

The packs contain 10, 25, 50 or 100 sheets, depending on size. Minor variations in size are possible, as a result of cutting tolerances and stretching (to DIN Standard 4506, Part 1 and ISO 1008).

Special versions are available on request.

Information on the Agfa black-and-white photo papers with **variable contrast** are given in the Technical Data P-53-P (AGFA MULTICONTRAST PREMIUM, RC-base) and P-54-P (AGFA MULTICONTRAST CLASSIC, fibre base).

Surface key

As well as the codes designating the paper types and contrast grades, the paper thickness, tint and surface are also indicated by a numerical code.

The **surface** is indicated by the ones digit.

.. 0 = glossy, natural high gloss (only for RC papers)

. 1 = glossy; smooth surface suitable for glazing (only for fibre-base papers)

...2 = semi-matt

The **surface tint** is indicated by the tens digit (not applicable to single-weight types as RECORD-RAPID 1).

. 1 . = white paper tint

The **base thickness** (paper thickness) is indicated by the hundreds digit:

1 . . = double-weight fiber-base paper

3.. = polyethylene coated paper (RC/PE)

Examples

B 310 RC = BROVIRA-SPEED, white, glossy (natural high gloss)

RR 1 = RECORD-RAPID, single-weight, white, glossy

RR 111 = RECORD-RAPID, double-weight, white, glossy

Marking on the labels

Paper type	Code	Contrast grade	Grade code	Grade bars	Colour m	arking on label
BROVIRA-SPEED	BEW	Extra soft	0		RC	= orange
310, 312	BW	Soft	1	I	also	
	BS	Special	2	II	310	= mauve
	BN	Normal	3	III	312	= yellow
	BH	Hard	4	IIII		
	BEH	Extra hard	5	IIII		
RECORD-RAPID	RRW	Soft	1	I	Baryta	= light blue
1, 111	RRS	Special	2	II	also	
	RRN	Normal	3	III	1	= mauve
	RRH	Hard	4	IIII	111	= mauve

A UPC bar code is printed on the labels (sheets).

Paper design

Base

	vveignt	Inickness
RC/PE paper	approx. 270 g/m ²	approx. 252 μm
Baryta paper, single weight	approx. 185 g/m ²	approx. 150 µm
Baryta paper, double weight	approx. 283 g/m ²	approx. 258 μm

In **RC/PE papers** the raw paper is coated on both sides with polyethylene. The light-sensitive emulsion is applied directly to the smooth plastic layer, and there is no intercoat.

In **baryta papers** there is a layer of barium sulphate (baryta) between base and emulsion. The baryta coating stops the emulsion soaking into the soft paper, and so improves definition and print blacks.

The baryta coating, depending on surface, is $20 - 45 \text{ g/m}^2$.

Emulsion

The light-sensitive emulsion consists of silver halide crystals precipitated in gelatine (silver bromide or silver chlorobromide mixed crystals).

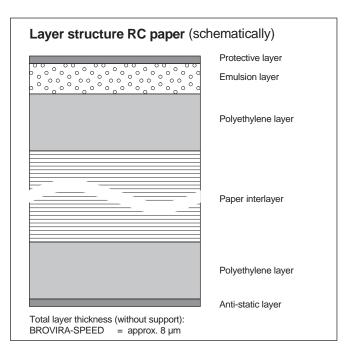
The emulsion on RC papers contains developing substances which permit fast mechanical processes to be used. BROVIRA-SPEED is also suitable for activator process.

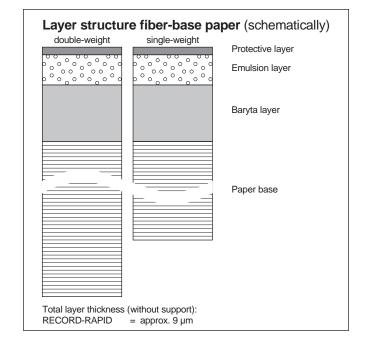
Silver coating, depending on surface and grade:

BROVIRA-SPEED = $1.5 - 1.6 \text{ g/m}^2$ RECORD-RAPID = $1.3 - 1.7 \text{ g/m}^2$

Supercoat

A thin coat of gelatine protects the papers from friction fog (pressure sensitivity) and mechanical damage.

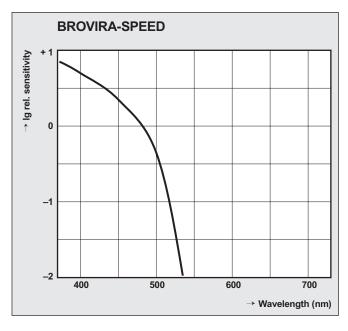


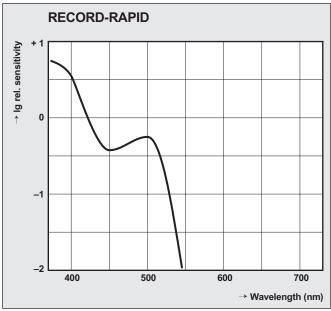


Spectral sensitivity

(related to equal energy spectrum)

The curves shown are related to a density of 1.0 in reflection. The sensitivity is the reciprocal of the exposure (in mJ/m²) necessary to produce the density given.





Speed

There is a speed rating standard for black-and-white photographic papers just as there is for film. This international standard (ISO 6846) is an arithmetic indication of the speed, i.e. half or double the number means that the speed is doubled or halved (in contrast to DIN standards in which double or half the speed rating represents an interval of 3 DIN).

BROVIRA-SPEED EW - H = ISO P 400

EH = ISO P 200

RECORD-RAPID W - H = ISO P 250

During production of Agfa black-and-white papers, great care is taken to ensure uniform speed from emulsion number to emulsion number and from grade to grade, within the production tolerances which can be achieved. It should however be noted that slight variations in speed, caused by aging and storage, are inevitable.

Extra hard paper grades are less fast, because they are designed for under-exposed, flat and consequently very transparent negatives. In this way extremely short exposures are avoided.

Maximum density

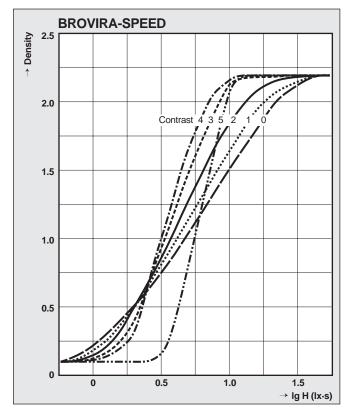
Depending on paper type and surface, the following maximum densities at least should be achieved, assuming that exposure and development are correct.

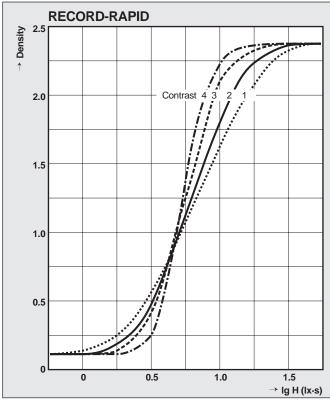
Paper types	Surface	Density			
RC paper	-				
BROVIRA-SPEED	310 RC	2.20			
	312 RC	2.10			
Baryta paper					
RECORD-RAPID	1 and 111	2.30			

- Silver bromide emulsions produce lower maximum densities than silver chlorobromide.
- The differences for the various surfaces are mainly the result of the measuring technique. Surfaces of different types, i.e. differently matted or containing more or less texture, produce lower readings than high gloss papers.

Density curves

Exposure: tungsten light 3000 K, time: 4 s Developer: AGFA NEUTOL LIQUID NE read with visual filter (V_{λ})





Print tone

The print tone of black-and-white photographic papers is an aesthetic feature. For technical pictures a paper with neutral black tone is usually preferred, for portraiture the choice would be a warm black tone. The print tone is a matter of taste — which varies regionally. It is also subject to trends in fashion.

The tones for black-and-white photographic papers are:

- neutral black BROVIRA-SPEED (silver bromide emulsion)
- warm black RECORD-RAPID (silver chlorobromide emulsion)

The print tone is basically a characteristic of the emulsion. It depends on the size and structure of the processed image silver. Larger silver grains produce a colder tone, and finer granular structures a warmer tone. The print tone can be changed within limits by development and special treatment.

The print tone of black-and-white photographic papers can furthermore be influenced by the following factors.

- The papers harden during lengthy storage, and generally the print tone becomes slightly colder.
- As the developer is exhausted, the print tone may be affected to a greater or lesser degree.
- Slight contamination of the developer with thiosulphate makes print tone initially slightly warmer. Strong contamination produces a change to a cold tone, and also an increase tendency to fog will be observed.
- An inadequate intermediate wash or a very exhausted stop bath can result in a change in tone in the high density areas (to blue).
- Too long fixing times, changes in concentration, and contamination of the fixer affect the original print tone.
- Fibre-base papers treated for too long in the soda finishing bath, or washed for too short or very long times (several hours) may be subject to changes in tone.
- Air and hot drying result in varying print tones (hot drying distinctly warmer). At extremely high drying temperatures the high densities may "burn out". The result is a drastic change in tone.

Printing range

The printing range of a photographic paper is the term for the difference in exposure between a defined maximum and minimum density. This "contrast-forming capacity" of the paper grades could be represented arithmetically by the ratio of the threshold exposure to maximum exposure, e.g. 1:4, 1:10, 1:32. It is however usual to state the printing range logarithmically. The logarithms of the numerical ratios given above are: R 60, R 100 and R 150 (in accordance with ISO Standard 6846).

The printing range is then the greatest exposure range in which details can be distinguished both in shade and in highlights. It provides information on the negative contrast — utilising the entire grey scale from white to black — which can be represented on a photographic paper.

Soft grade papers have a wide printing range. They can cope with a great density range in a (hard) negative. Hard gradation papers — that is with a low printing range — are suitable for low-contrast negatives with a narrow density range.

Paper types	Extra Soft	Soft	Special	Normal	Hard	Extra Hard
BROVIRA- SPEED	R 150	R 130	R 110	R 90	R 70	R 50
RECORD- RAPID	1	R 150	R 120	R 90	R 70	-

These figures are means for ready-to-use papers, depending on age, storage and processing.

Storage life of BW photos

(Image silver stability)

The first and essential requirements for a long storage life for BW prints are proper fixing and a good final wash.

It has been known for some time that, even if a film has been properly processed, external influences may cause the image silver to turn yellow-brown – to produce the so-called mirror effect.

The causes are pollutants such as formaldehyde, nitrous oxides, ozone, peroxides, sulphur compounds etc., which may be present in the atmosphere or materials with which BW prints come into contact (e.g. carrier materials, glues, plastic mounting and protection foils). The deterioration is started by the image silver oxidising: silver salts form which can migrate and are unstable. They can subsequently separate out as colloidal silver, as metallic glossy mirror silver or as silver sulphide. The result is that the print deteriorates or turns brown.

However image silver stability can be permanently improved by the following measures:

Treatment of the prints (both RC / PE and baryta / fibre-base papers) with the image silver stabiliser AGFA

Further details of Agfa SISTAN are given under "Image silver stabiliser".

2. Toning with AGFA VIRADON or other toners

Toning results in high image silver stability. However as the name implies, it also changes the print tone to a greater or lesser degree, depending firstly on the toner and type of toning (direct or indirect toning), and secondly on the paper used. Further details of AGFA VIRADON are given under "Toning".

Safe archive storage of BW photos also requires optimum conditions (see ISO Standard 6051) and the use of suitable storage materials (see ISO Standard 10214).

Print silver stabilizer

AGFA SISTAN protects prints from deterioration of the image silver. The silver is protected by the silver salts formed by oxidation being converted to silver rhodanide. This is a colourless insoluble salt which settles on the grain surface and so protects the silver from further attack.

The SISTAN treatment takes place after the final wash. The BW image is treated for a minute in a solution of 25 ml SISTAN + 975 ml water, and then dried. Up to 2 m² of paper can be treated in 1 litre of SISTAN solution.

SISTAN is not a toner, so that this treatment does not lead to an alteration in the print tone.

Toning

The metallic (black) print silver is converted to a single-colour image by toning processes. The print silver is either replaced with coloured metals, or coloured metal compounds accumulate on the silver grains. Toned photographs are especially durable with long storage lives, because these silver complex compounds are less subject to breakdown by environmental factors. Toning is the best print silver stabilisation method.

Only photos which are correctly exposed, developed to specification, fixed in really fresh fixer and well washed are suitable for toning. In principle any black-and-white paper can be toned, however warm tone papers produce the best results.

Toning can be either direct or indirect. **Direct** toning converts the silver image to a different silver compound in one operation. With **indirect** toning the prints have to be bleached first. A new image is produced in a second bath, but it consists of a differently coloured silver compound.

AGFA VIRADON

The simplest method is toning with VIRADON. It has the advantage over other toning solutions of not affecting the gradation of the prints. In some cases the prints have to be exposed slightly darker.

VIRADON selenium / sulphur toner is currently regarded as one of the best image silver stabilisers.

If the instructions for its use are followed, it achieves very high, archive-standard silver stability. The image silver is converted to a mixture of silver selenide and silver sulphide, which is quite insensitive – in regard to oxidising gases.

Direct toning

AGFA VIRADON 1 + 50

1 - 10 min*

(1 part VIRADON + 50 parts water)

(depending on intensity required)

Stop bath * (10 % sodium sulphite solution)

1 min

only necessary if after-toning in the wash is to be prevented

Final wash

(as given for RC and fibre-base papers)

Indirect toning

Bleaching: 44 BL bleach* 1 + 3

2 - 5 min

(1 part 44 BL concentrate + 3 parts water)

Process 44

(Bleach for colour reversal film processing)

or Bleach (AGFA 501 formula):

5 min

500 ml 10% potassium ferricyanide solution

100 ml 10% potassium bromide solution

400 ml water

Wash (running)

AGFA VIRADON 1 + 50

5 min 3 min

(possibly stop bath as for direct toning)

Final wash (as given for RC and baryta papers)

Process temperature: 20 °C / 68 °F.

If the aim is just to make prints stable for storage (image silver stability), the direct toning method should be used since it changes the print tone very little. Indirect toning produces much warmer print tones (yellow-red).

BROVIRA-SPEED 310 (RC high gloss paper) is less suitable for indirect toning, since this method may result in a matter gloss in the dark to black print areas than in the lighter areas.

N.B. To prevent staining, the prints have to be placed in the VIRADON solution singly, and then agitated well. Also make sure that the prints to be toned are treated with a fresh fixer solution as possible and then well washed. Thorough washing is also necessary after toning.

In one litre of ready solution 2 to 3 m² of photo-paper can be toned (equivalent to 45 to 70 sheets sized 17,8 x 24 cm).

Storage life

The concentrate will keep virtually indefinitely in closed bottles. The ready solution cannot be re-used.

Processing in trays -**RC** and Baryta paper

Development

RC and fibre-base papers behave differently during development. RC papers react very quickly in the developer. After just a few seconds the image has been developed to the point where the remaining time merely serves to build up maximum densities.

Fibre-base paper reacts more slowly, the image is built up progressively, and thirty seconds longer is needed to produce maximum densities.

The specified developing times must be kept to. They are 90 seconds for baryta paper, at 20 °C / 68 °F. The developer substance incorporated in RC papers permits the time to be cut to 60 seconds.

Stop bath

A 2 % acetic acid stop bath is recommended for all B/W papers, and is mixed as follows:

- 1 part acetic acid (98 %) + 50 parts water or
- 1 part acetic acid (60 %) + 30 parts water or
- 1 part acetic acid (30 %) + 15 parts water

Instead of acetic acid a 4 % sodium disulphite stop bath may also be used.

The stop bath stops development. This prevents post-development and the formation of yellow fog. It also neutralises the alkaline parts of the developer in the photographic layer, and so prolongs the fixer's life.

It is imperative to include a stop bath with warm tone papers (for ex. RECORD-RAPID) and when hardener-fixer is used.

Processing on roller transport machines

Black-and-white RC papers are also suitable for processing on machines using the roller transport system, if the solutions are properly replenished. For the processing conditions see the P-56-C Technical Data brochure.

Processing in trays – RC Paper

Processing sequence	Process solution	Proces	Process times	
		20 °C / 68 °F	25 °C / 77 °F	
Developer	MULTICONTRAST-DEVELOPER			
	Standard dilution 1 + 4	50 ± 10 s	30 ± 10 s	
	Economy dilution 1 + 6	75 ± 10 s	50 ± 10 s	
	NEUTOL, NEUTOL LIQUID NE, WA			
	Standard dilution 1 + 7	60 ± 10 s	45 ± 10 s	
	Economy dilution 1 + 11	90 ± 10 s	60 ± 10 s	
	NEUTOL Plus 1 + 4	50 ± 15 s	30 ± 10 s	
	NEUTOL NE, WA, BL	60 ± 10 s	45 ± 10 s	
Stop bath	2 % acetic acid	10	10 s	
Eiwar	MULTICONTRAST FIXER 1 + 4	20 ±	10 s	
Fixer	MULTICONTRAST FIXER 1 + 7	40 ±	15 s	
Wash	running water, over 12 °C / 54 °F	2 n	nin.	
Wasii	running water, under 12 °C / 54 °F	4 n	nin.	

Processing in trays – Baryta Paper

Processing sequence	Process solution	Proces	Process times	
		20 °C / 68 °F	25 °C / 77 °F	
	MULTICONTRAST-DEVELOPER			
	Standard dilution 1 + 4	90 ± 10 s	70 ± 10 s	
	Economy dilution 1 + 6	110 ± 10 s	90 ± 10 s	
	NEUTOL, NEUTOL LIQUID NE, WA			
	Standard dilution 1 + 7	90 ± 10 s	60 ± 10 s	
	Economy dilution 1 + 11	120 ± 10 s	90 ± 10 s	
	NEUTOL Plus 1 + 4	90 ± 10 s	70 ± 10 s	
Developer	NEUTOL NE, WA, BL	90 ± 10 s	60 ± 10 s	
Stop bath	2 % acetic acid	30	30 s	
Fixer	MULTICONTRAST FIXER 1 + 4	60 ±	60 ± 20 s	
rixei	MULTICONTRAST FIXER 1 + 7 120 ± 30 s		± 30 s	
Soda intermediate bath	see n	see next page		
Wash	running water, over 12 °C / 54 °F	54 °F 20 – 30 min.		
VVasii	running water, under 12 °C / 54 °F	30 – 4	10 min.	

Choose exposure times which produce prints with optimum density in the given developing time. Slightly longer developing times (up to a maximum of 3 minutes) are not as a rule critical.

The specified fixing times should if possible not be exceeded.

The ADAPTOL, AGETOL LIQUID and METINOL developers and the AGEFIX and ACIDOFIX fixers can also be used, bearing in mind their special features. Other standard black-and-white paper developers and fixers are also suitable (for further details refer to the Technical Data sheet P-56-C).

Fixer

The fixers recommended are:

- MULTICONTRAST FIXER (liquid fixer concentrate)
- AGEFIX (fixer concentrate)
- ACIDOFIX (acid fixer salt, in powder form)

The fixing times listed in the tables depend on the paper type used (emulsion, silver coating), temperature agitation and condition of the fixer solution in use. The shorter fixing times apply to fresh fixers, the longer times to used solutions without replenishment. Excessively long fixing produces bleached highlights and prolongs the final washing time of baryta-coated papers.

Proper fixing ensures that the prints are durable. Consequently fixer solution in use should be regularly checked for composition, since rises in silver content, dilution, and variations in acidity (pH) impair the solution's action.

Soda intermediate bath

A soda bath (1 % sodium carbonate solution) can be included for fiber-base paper, between fixer and final wash. This ensures that the fixer is washed off the paper surface faster and more thoroughly. This not only cuts down the final washing time by about 30 %, and in particular it increases the prints' durability.

If a hardener-fixer is used, the soda intermediate bath is not recommended.

Wash

The final wash is an extremely important factor for print durability. Depending on agitation, temperature, and water input and output, the washing times are as follows:

Resin-coated papers
 Baryta papers
 Baryta papers after soda intermediate bath
 2 - 4 minutes
 20 - 40 minutes
 15 - 30 minutes

RC paper washing times are much shorter than the times for fibre-base papers, because the polyethylene coating prevents solution penetrating the paper surface, and so only the emulsion has to be washed.

NB: Too long washes can cause RC prints to curl.

Activator process

The developer substance incorporated in the emulsion of AGFA BROVIRA-SPEED paper also enables activator processes to be used (e.g. AGFA RAPIDOPRINT).

Process on "DD 3700" RAPIDOPRINT machine:

activator G 182 B
 fixer G 386 C
 15 seconds (at 22 °C / 72 °F)
 15 seconds (room temperature)

washdryingdrying2 x 15 secondscontrol setting 2

Darkroom safelights

The following safelight filters can be used for processing blackand-white photographic papers:

G 7 (yellow-green) for **direct** working area illumination (15 watt lamp, distance 2½ ft / 75 cm)

Y 7 J (yellow-green) for **indirect** working area illumination (25 watt lamp, distance 8 ft / 2.50 m)

Too bright darkroom lighting and/or too long exposure flatten contrast and fog the paper. If different safelight filters are used, the instructions for lamp power, distance between lamp and working surface, lighting angle (direct/indirect) and period of exposure **must** be followed.

Sodium vapour lamps, e.g. Osram Duka 50 Universal, are also suitable. However the following test should be made to check whether they can be used.

- First briefly expose a sheet of photographic paper evenly over its complete surface, and develop it at once. A slight grey fog must be visible.
- Expose a second sheet for the same time, and then expose it to the darkroom light. Mask steps on the sheet with black paper for thirty seconds, taking at least three minutes for the complete sheet. Then process.
- The light is safe when sheet 1 and sheet 2 have identical grey values.
- If the stages of brightness differ on sheet 2, the denser grey level on sheet 1 indicates the maximum time the paper can be exposed to the safelight concerned.

This test only establishes safety for fogging. Too long exposure to a safelight can however also shift the contrast to "soft" by invisible pre-exposure. For this reason two prints of a negative with medium contrast should also be exposed for the same time. One sheet is developed immediately, and the other after being exposed to the safelight concerned for the specified time. If both prints have the same gradation, the light is competely safe.

If the second print is softer, remedy this by reducing the lighting power, increasing the distance from the working surface, indirect lighting or a safer filter.

Drying

RC papers

Hot air drying up to 85 °C / 185 °F. The following drying methods are possible:

- Special infrared dryers, or equipment in which heated air is blown on to the moving prints.
- Drying in RC paper dryers which blow warm air on the prints passing through.
- Hot air drying in cabinets.
- Air drying on racks (first wipe the print surfaces with a damp cloth to prevent drying stains).

Hot-drying of RC papers on drums or in glazing presses is not possible.

Baryta papers

The high gloss papers RECORD-RAPID 1 and 111 have hardened emulsions, and can be hot-dried on drums and in glazing presses.

In practice the RECORD-RAPID high gloss paper is also dried on heated presses with the emulsion facing the fabric, to produce a matter surface. This method should however only be used, particularly when paper is fresh and not completely hardened, if

- a hardener-fixer solution is used
- the temperature of the glazing press is not higher than 70 °C / 158 °F
- the drying fabric is not stretched too tight
- the drying fabric lets water vapour through, i.e. is not clogged with gelatine residues (if it is, it can be cleaned with enzymes, e.g. Biolase made by Hoechst AG Frankfurt or Papain made by E. Merck Darmstadt).

When high gloss papers are **air dried** at room temperature, the gloss may vary between the different types and grades. The degree of variation depends on the paper's age and the processing and drying conditions in the lab.

Print finishing

Marking, stamping and retouching fibre-base papers is quite simple. RC papers on the other hand can be dealt with as follows.

The following special pens are suitable for **marking** back and front:

Pelikan Markana 33
"Quickpoint" slide marker
OH-Lux
Lumocolor Permanent

Edding 400 and 3000

Pelikan, D-30177 Hannover Loersch, D-47639 Straelen Faber-Castell, D-90547 Stein Staedtler Mars, D-90419 Nürnberg C.W. Edding, D-22926 Ahrensburg

Ball-point pens are also suitable for marking the backs of prints.

Retouching (spotting) is possible with standard retouching paints. Use a moist brush. Work on the prints if possible when they are wet, to avoid matt marks. It is more difficult to scrape RC than fibre-base papers. The standard transparent and opaque retouching paints, as used for fibre-base papers, are suitable for spraying.

Special black and blue **stamping** inks are supplied by Gutenberg Werk mbH, D-55122 Mainz for RC papers.

Mounting

Liquid glues

Bicoll G 6 Bretschneider, D-57684 Unnau Efbecol-Pla 12 Branding, D-31275 Lehrte

Planatol AD 94/5 B Planatol-Werke, D-83022 Rosenheim

Cold adhesive films/foils

Gudy products
Lomacoll
Permaprint
Artmount
Certoplast
Neschen, D-31675 Bückeburg
Lohmann GmbH, D-56567 Neuwied
Morgan Adhesives, D-50735 Köln
Korn-Sallmetall, D-42766 Haan
Hilsdorf, D-55411 Bingen

Hot adhesive foils

Hot adhesive tissue 204 Hilsdorf, D-55411 Bingen Ademco D 5 Dry-Mounting GmbH, D-59929

Brilon

Colormount Seal, D-70806 Kornwestheim

Note

The data published here are based on an evaluation of standard products made in 1997. Slight variations are possible, due to production tolerances. Agfa-Gevaert makes every effort to improve the quality of their products, and therfore reserves the right to modify them if necessary.

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