

STANDARD Black & White Film Developer

Like all other Sprint chemicals, we supply it as a liquid concentrate. You dilute it 1:9 with water, to make a working solution. In other words, if you are going to develop 4 rolls of 35mm film in a typical stainless-steel tank, which holds 1 liter, you will need to combine 100 ml of concentrate with 900 ml of water.

One liter of STANDARD concentrate will make 10 liters of working solution, enough to develop at least (50) rolls of 35mm 36 exposure film, (or enough replenished solution to develop 110 rolls). Directions provided here are for basic negative processing, using the developer once only.

100ml STANDARD B&W Film Developer Concentrate

+ 900ml Water

= 1000ml STANDARD B&W Film Developer Working Solution

Procedures for Processing B&W Negative Films

Time, and temperature (- and agitation – more on that later –) are very important in film developing. The warmer the developer, the faster it acts, while cool temperatures slow things down. Develop long enough and hot enough, and your film will all but turn a solid black; too short a time and too cold will hardly give you anything. For a rich, easily printed, full gradation image, you have to get it right. While experience – and keeping good notes on what you did – is the best teacher, Sprint's Standard Film Developer Time Chart ([here](#)) will give a good starting point.

Sprint tries to make things easy for you – within limits you can process film at room temperature – the temperature at which everything tends to end up anyway* – and adjust developing time according to our chart, rather than struggling to maintain exactly 20 or 24 degrees Celsius.

*In very dry conditions, desert or a heated building in very cold weather, all solutions will tend to evaporate faster than usual, which may cause a degree or two of unexpected cooling.

Chart Letters

Different films develop at different speeds; Sprint's Chart Letter summarizes this information and gives you a convenient way to find the appropriate developing time at **your** room temperature. You can develop any films with the same chart letter together in the same tank.

To find the recommended development time for your film, find it on the STANDARD Film Developer Time Chart, and read across to the column with your working temperature at the top. For example, for Ilford HP5+ at 75 degrees F/24 degrees C we recommend 6:30 – that is 6 minutes 30 seconds. With experience, you may want to make your own adjustments.

If your working temperature is not on this chart, simply note the letter next to your film (for HP5+ that would be "O"), and go to Sprint's Development Timing System Chart ([here](#)). Find "O" in the first column ("CHART LETTER") and you can read off from that row all the different development times for the different temperatures at the heads of the columns. So, if you are going to develop your HP5+ at 23 degrees C/73.5 degrees F, you will find 7:15 – 7 minutes and 15 seconds.

This all assumes you have photographed a "normal" subject, with a good quality lens/camera, in "normal" light (rather than very flat or very contrasty lighting), and have not waited too long (more than a handful of days, maybe a week or two) before processing. We assume you are going to make enlargements using a condenser enlarger, variable-contrast paper and a # 2 and a half filter.

If you have done something else, you can adjust development to make your negatives easier to print. At the bottom of the Standard Film Developer Time Chart is a table of adjustments. For example, if you had used film that had passed its expiration date you would add **1** chart letter (going to "P" for your HP5+). If you were **also** planning to use a color head enlarger when printing, you would add **3 more** chart letters (going to "S"). Your suggested development time at 23 degrees C/73.5 degrees F now becomes 12 minutes 30 seconds.

Developing Film Procedure

We suggest you prepare all solutions in advance, allowing enough time for them to come to room temperature. If they are at different enough temperatures, the thermal shock to the gelatin of the film can cause apparent graininess. In the days before modern, pre-hardened emulsions, this was a much more serious problem and you might get reticulation – a sort of reptile-skin effect.

If your water supply does not come from a thermostatic valve, or is very warm or cool, consider getting a stainless-steel or plastic tank large enough to hold all the water needed for a complete processing cycle, and filling it long enough in advance to reach room temperature. Some clean, empty gallon water jugs might be a low-cost alternative.

Use all solutions at (or as close as possible to) the temperature selected for development (step 2). Normally this would be room temperature.

1. Room temperature water Pre-wet. 1 minute (at least, longer does no harm), continuous agitation.

Wets the film all over to development starts evenly and consistently. If colored water comes out, this is likely dissolved anti-halation dye, and is not a problem.

2. Development with Standard Working Solution at room temperature. See above (“Chart Letters”) table for timing and below (“Agitation”) for agitation.

Because the film will still be wet with developer, some development will continue even with the developer poured out; experience will help you allow for this in your timing. In practice, usually developer is only used once; for developing large quantities of film, we have instructions for replenishment.

3. Stop Bath (Block mixed 1:9) 1 minute (at least, longer does no harm), continuous agitation for the first minute. If you need to leave the film, make sure you have used enough stop bath to cover it.

Development actually stops when the Stop Bath hits the film. The developer is alkaline, and the mildly acidic Stop Bath prevents the developer from contaminating the fixer. Working Stop Bath is pale yellow when fresh, and may be used until the color changes to purple, indicating exhaustion. Film and print stop baths should not be interchanged.

4. Record Speed Fixer Working Solution (Record Speed Fixer diluted 2:8 with water). At least 1 minute, constant agitation.

The rule of thumb is to fix with constant agitation for twice the clearing time, and to discard the working solution when the clearing time has doubled. (If you keep the narrow pieces from the ends of 35mm films you can use these to find the clearing time – it is easy to grab a small strip with the print fixing tongs and swish it around in a beaker of fixer. You will notice that slow, fine-grain films clear faster than high-speed films). If your film is particularly important to you, always err on the side of using fresh fixer!

5. Water Pre-Wash 1 minute

The tank may be opened at this stage; if the film looks milky, all is not lost, it has little

light-sensitivity. Put the lid back on, mix some fresh fixer and fix again for a minute. If you have the kind of water hose that can be pushed down through the centers of the reels, make sure it has reached the bottom of the tank, so that clean, tempered, water enters at the very bottom.

Or, fill with water, put lid back on, agitate vigorously for 30 seconds, pour out through the lid, making sure to also rinse the cap. Repeat, repeat again. This stage removes fixer that has not been absorbed into the emulsion.

6. Archive Fixer Remover Working Solution (1:9) 1-3 minutes, continuous agitation. 1 minute for commercial permanence or if you're really in a hurry, 3 minutes for archival. Archive Working Solution is blue-green when fresh and is kept and reused until it changes color to yellowish-green. It is good practice, although not essential, to keep separate working solutions for films and prints.

In this step the Archive reacts with fixer residues and other unwanted substances in the emulsion to make them more water-soluble so that they can be washed out.

7. Water Wash, 3 minutes.

Make sure the flowing water is close to the temperature of the previous processing solutions. If using a hose, make sure it enters at the very bottom of the tank, flowing out over the top edge. Make sure it is flowing at a rate fast enough for a complete change every 15-20 seconds.

Or, fill the tank with water at room temperature. Put the lid back on, agitate vigorously for 30 seconds, pour out through the lid, being sure the cap gets rinsed too. Ten repetitions gives a well-washed film.

8. End Run Wetting Agent & Stabilizer (superconcentrate, dilute 1:99, preferably with distilled or deionized water, especially if your water supply is hard) 1 minute
In practice add 1 capful (~10 ml) to 1 liter of water. Agitation is not necessary and would cause foaming; mixing in a strictly clean container and pouring into the open tank is enough to evenly distribute the superconcentrate in the water. It does no harm to leave the film in the End Run working solution for a few minutes before sponge squeegeeing. In principle the shelf-life of End Run working solution can be up to 30 days; in practice it tends to accumulate mysterious tiny pieces of debris, maybe sponge and film fragments, (or maybe dandruff), and can be reused on the next batch or two of processing.

9. Sponge squeegee gently. (Ideally use sponge tongs reserved for this, dip them in the End Run working solution and then squeeze them. Hang the film to dry, away from dust, and gently squeezing run the tongs down the film, being careful not to pull it off its clip. If it falls to the floor, wash it again).

Use a sponge squeegee; fingers leave an uneven coating, and rubber-blade squeegees can easily scratch the film.

If you are processing sheets of film too large to squeegee, use 3 ml of End Run per liter

of water, and simply hang to dry.

Check that film is in fact completely dry before starting to cut and file!

Step	Procedure	Timing
1	Water Pre-Wet	1 minute
2	STANDARD Film Developer	See Chart Letters
3	BLOCK Stop Bath	1 minute
4	RECORD Speed Fixer	3 minutes
5	Water Pre-Wash	1 minute
6	ARCHIVE Fixer Remover	3 minutes
7	Water Wash	3 minutes
8	END RUN Wetting Agent & Stabilizer	1 minute
9	Sponge Squeegee & Dry	

Agitation

For each step listed above, agitate continuously for the first MINUTE and for 10-15 seconds of each MINUTE thereafter. During development (step 2), if development time is less than 6 minutes, agitate continuously for the first MINUTE and for 10-15 seconds of each HALF-MINUTE thereafter. When development time is less than 3 minutes, agitate continuously. Use only enough solution to cover reels, leaving an air space for thorough agitation with bubbles. (In general, more agitation gives contrastier negatives, which is sometimes desirable, but more often makes them harder to print. As always, our recommendations are intended as a useful starting point, and you should modify them in the light of your own experience).

QUICK SILVER Print Developer

STANDARD DILUTION

Dilute QUICK SILVER concentrate 1:9 with water to make the desired volume of working solution.

100ml QUICK SILVER B&W Print Developer Concentrate

+ 900ml Water

= 1000ml QUICK SILVER B&W Print Developer Working Solution

ALTERNATE DILUTION

Dilute QUICK SILVER concentrate 1:19 to make a weaker working solution, which is economical when printing in large trays or whenever the full capacity of a 1:9 solution cannot be used. This dilution has a slower activity, which is useful when exposure or development of prints cannot be limited enough to reduce excess density. Minimum times for a 1:19 working solution are approximately 30 seconds longer than in the 1:9 working solution. The capacity and shelf life of 1:19 solution are one-half that of the 1:9 solution.

50ml QUICK SILVER B&W Print Developer Concentrate

+ 950ml Water

= 1000ml QUICK SILVER B&W Print Developer Working Solution

Water Washes

Minimum water wash time for commercial purposes is 10 minutes for fiber-based prints, and 3 minutes for RC prints.

For thorough washing to archival specifications, please refer to the **Archival Procedures** described in the instructions for using ARCHIVE Fixer Remover.

Exposure & Development

Once immersed in QUICK SILVER, most RC prints will develop to their final contrast and color characteristics within 30-60 seconds, and then continue to increase in overall density only.

Most Fiber prints will develop to their final contrast and color characteristics within a range of 1:30 – 3:00 minutes and then continue to increase in overall density only.

With five times the minimum development time, density will increase by approximately 1 full stop in fiber prints or 1/3 stop in resin-coated papers. Development may continue past this point but

the density increase will be slight and safelights may fog prints. Development for less than the minimum time will result in flat, uneven density.

Prints which need very long development to reach desired density are underexposed. If you can, try again, adding exposure so that the print develops to the desired density within 1-4 minutes, at any temperature 18-25°C / 64.5-77°F.

BLOCK Stop Bath

Dilute BLOCK concentrate 1:9 with water to make the desired volume of working solution.

100ml BLOCK Stop Bath Concentrate

+ 900ml Water

= 1000ml BLOCK Stop Bath Working Solution

Stop Bath Procedure

Use BLOCK Stop Bath working solution at the same temperature as the developer solution. Never subject film to sudden temperature changes in processing; reticulation, or an apparent increase in graininess may be the result.

For Films: Immerse for at least 1 Minute with continuous agitation. **For Prints:** Immerse for at least 5 Seconds with continuous agitation. Hardening Stop Bath

BLOCK Stop Bath may be converted into a hardening stop bath for sepia toning, or to replace hardening in the fixer if sulfur dioxide vapors must be minimized. Substitute the following converted working solution for the normal stop bath and immerse films or prints for 3-6 minutes with agitation.

40ml BLOCK Stop Bath Concentrate

60ml ARCHIVE Fixer Remover Concentrate

900ml Water

+ 30ml RECORD Alum Hardening Converter Concentrate = 1030ml Hardening Stop Bath Working Solution

When mixing hardening stop bath, the order of mixing is important. The Archive and Block concentrates may be mixed with water in any convenient order, but the Record Alum Hardener Concentrate must be added last.

RECORD Speed Fixer

Choose the desired working solution from the examples below:

FILM FIXER

Dilute RECORD Speed Fixer concentrate 2:8 with water. It is good practice to use distilled or deionized water. In the (now rather unlikely) event you need a hardening fixer, then to each liter of diluted fixer add 30ml of RECORD Alum Hardening Converter concentrate.

For example:

200ml RECORD Speed Fixer Concentrate

800ml Water

+ 30ml RECORD Alum Hardening Converter Concentrate = 1030ml RECORD Hardening Film Fixer Working Solution

PRINT FIXER

Dilute RECORD Speed Fixer concentrate 1:9 with water. For example:

100ml RECORD Speed Fixer Concentrate

+ 900ml Water

= 1000ml RECORD Print Fixer Working Solution

FAST PRINT FIXER

Dilute RECORD Speed Fixer concentrate 2:8 with water. For example:

200ml RECORD Speed Fixer Concentrate

+ 800ml Water

= 1000ml RECORD Fast Print Fixer Working Solution

HARDENING PRINT FIXER

Dilute RECORD Speed Fixer concentrate 1:9 with water. To each liter of diluted fixer, add 15 ml of RECORD Alum Hardening Converter concentrate. This is used if you need to hot-ferrotype glossy fiber-base prints or if you need maximum gloss on RC glossy prints. You must be sure to use Block Stop Bath before hardening fixer, to provide the correct acid value. Hardening increases with immersion time, but unfortunately so does thiosulfate absorption. For very rapid

print fixing with hardening, immerse prints in Hardening Film Fixer working solution for 30 seconds only with constant agitation.

For example:

100ml RECORD Speed Fixer Concentrate

900ml Water

+ 15ml RECORD Alum Hardening Converter Concentrate = 1015ml RECORD Hardening Print Fixer Working Solution

How to Use

To fix either B&W films or prints, immerse in working solution for a minimum of 3 minutes. Agitate continuously for the first minute, and for 10-15 seconds for each minute thereafter.

USE NON-HARDENING FIXER FOR NORMAL B&W PRINTS

Prints may be left in non-hardening fixer for at least 10 minutes without bleach damage. To reduce print fixing time, use the Fast Print Fixer working solution for 30 seconds with constant agitation.

USING HARDENING FIXER

Use BLOCK Stop Bath before fixing to provide the correct acid value for hardening.

Resin-coated prints may be hardened in the fixer for a hard gloss finish. Without hardening resin-coated prints will have a soft-gloss finish. Fiber prints should not be hardened except under certain circumstances.

Excessive hardening can make prints brittle and difficult to wash and tone. Correctly timed hardening and washing with ARCHIVE Fixer Remover will ensure best results.

Please consult directions for using RECORD Alum Hardening Converter and ARCHIVE Fixer Remover for more detailed information before using hardening fixer.

Odor

RECORD Speed Fixer alone has no objectionable odor. When RECORD Alum Hardening Converter is added, a slight odor is generated by sulfur dioxide vapors.

ARCHIVE Fixer Remover

Dilute ARCHIVE Fixer Remover concentrate 1:9 with water to make the desired volume of working solution.

For example:

100ml ARCHIVE Fixer Remover Concentrate

+ 900ml Water

= 1000ml ARCHIVE Fixer Remover Working Solution

How to Use

The life expectancy of films and prints is increased by the thorough removal of thiosulfate and other contaminants through washing. The quick BASIC PROCEDURE meets commercial requirements. Variations listed under ARCHIVAL PROCEDURES increase the effectiveness of ARCHIVE Fixer Remover to meet stricter archival requirements.

BASIC PROCEDURES

After fixing as directed in the instructions for RECORD Speed Fixer, follow this BASIC PROCEDURE to meet commercial standards of permanence. (Less than 2 mcg/cm² thiosulfate.)

For B&W Negative Films and RC Papers

Step Procedure Timing

Water Pre-Wash 1 minute

ARCHIVE Fixer Remover 2-3 minutes Final Water Wash 1-3 minutes

For Fiber Prints

Step Procedure Timing

Water Pre-Wash 1 minute ARCHIVE Fixer Remover 3 minutes Final Water Wash 10 minutes

Agitate continuously for the first minute, and for 10-15 seconds of each minute thereafter. Use at any temperature 18-25°C / 64.5-77°F. For films, to avoid reticulation, working solution should be at the same temperature as other solutions in the process.

WATER WASHES

The following empty & refill method is imperative for thorough washing. Most automatic washers exchange water much too slowly, only once every 6-60 minutes.

For a more thorough washing procedure, that meets archival specifications, see ARCHIVAL PROCEDURES below.

For Films

Exchange water completely (empty & refill) three times in a row, then once every 20 seconds.

For Prints

Exchange water completely (empty & refill) once every 20 seconds in the first minute, and then at least once every three minutes, for a total of at least 6 complete changes of water in a 10 minute Final Wash.

ARCHIVAL PROCEDURES

The BASIC PROCEDURE listed above may be changed to meet higher archival standards of permanence. (Undetectable levels of thiosulfate).

For Films

Fix in RECORD Film Fixer working solution and follow the BASIC PROCEDURE with a full 3 minutes in Step 3: Final Water Wash.

For Prints

Any one of the following variations on the BASIC PROCEDURE will reduce thiosulfate concentrations to less than 1 mcg/cm². Any five of the following variations will reduce thiosulfate to undetectable levels.

Use RECORD Fast Print Fixer (2:8) and limit fixing time to 30 seconds.

Limit Fixer Capacity to twelve 8×10 prints per liter or use a second fresh fixer bath (20-60 seconds) before Prewash.

Extend Prewash (Step 1) to 5-10 minutes.

Extend Final Water Wash (Step 3) to 20 minutes.

Repeat Steps 2 and 3, with or without selenium toner.

Omit Alum Hardening Converter.

Holding Bath

For convenience, prints may be held in a tray of plain water between Steps 1 & 2 of the BASIC PROCEDURE for up to 30 minutes. To hold prints for more than 30 minutes, empty & refill holding tray every 30 minutes, or add 1ml

(20 drops) of BLOCK Stop Bath concentrate per liter of water in the holding tray (to retard microbial growth in still water).

Selenium Toning

ARCHIVE Fixer Remover is an excellent vehicle for selenium toner. To make a working solution for selenium toning, dilute ARCHIVE Fixer Remover concentrate 1:9 with water. To each liter of this fresh working solution add 15-60 ml of selenium toner concentrate.

For example:

100ml ARCHIVE Fixer Remover Concentrate

900ml Water

+ 50ml Selenium Toner Concentrate

= 1000ml ARCHIVE Selenium Toner Working Solution

After completing the BASIC PROCEDURE, immerse prints in the ARCHIVE selenium toner working solution for 1-3 minutes and then repeat the Final Water Wash (Step 3). Selenium toning may be done without completing the BASIC PROCEDURE first, but the life of the toner solution will be reduced from 3 months to 12 hours. Varying the amount of selenium toner in the working solution will alter the degree of change in print color.

RECORD Alum Hardening Converter

Add RECORD Alum Hardening Converter concentrate to RECORD Speed Fixer in a ratio of 15 ml Converter to every 100 ml RECORD Fixer concentrate present in the working solution. On no account mix Alum Hardening Converter with RECORD Speed Fixer Concentrate, only add it to working solution.

Choose the desired working solution from the examples below.

HARDENING FILM FIXER

Dilute RECORD Speed Fixer concentrate 2:8 with water. To each liter of diluted fixer, add 30 ml of RECORD Alum Hardening Converter concentrate. This is only called for in rare cases – such as hand-coated films or plates – as modern commercially available films are all (as far as we know) pre-hardened in manufacture.

For example:

200ml RECORD Speed Fixer Concentrate

800ml Water

+ 30ml RECORD Alum Hardening Converter Concentrate = 1030ml RECORD Hardening Film Fixer Working Solution

HARDENING PRINT FIXER

Dilute RECORD Speed Fixer concentrate 1:9 with water. To each liter of diluted fixer, add 15 ml of RECORD Alum Hardening Converter concentrate.

For example:

100ml RECORD Speed Fixer Concentrate

900ml Water

+ 15ml RECORD Alum Hardening Converter Concentrate = 1015ml RECORD Hardening Print Fixer Working Solution

HARDENING STOP BATH

Dilute BLOCK Stop Bath and ARCHIVE Fixer Remover concentrates with water in the proportions described below.

To each liter of this working solution, only then add 30 ml RECORD Alum Hardening Converter concentrate.

For example:

40ml BLOCK Stop Bath Concentrate

60ml ARCHIVE Fixer Remover Concentrate

900ml Water

+ 30ml RECORD Alum Hardening Converter Concentrate = 1030ml Hardening Stop Bath Working Solution

When mixing other quantities of hardening stop bath, please be sure to maintain not only the correct proportions but also the order described above.

How to Use

HARDENING FILM AND PRINT FIXERS

Fix for 1-3 minutes as directed in instructions for RECORD Speed Fixer. Hardening increases with immersion time. To reduce hardening, shorten immersion time.

HARDENING STOP BATHS

Immerse films or prints for 3-6 minutes with constant agitation, as directed in instructions for BLOCK Stop Bath.

Compatibility

RECORD Alum Hardening Converter is compatible with SPRINTTM products only. Do not mix with other brands of fixer. Do not mix other brands of hardener with SPRINTTM products.

Before toning or spot coloring, hardened prints must be treated with ARCHIVE Fixer Remover and washed, as directed by instructions for using ARCHIVE Fixer Remover.

END RUN Wetting Agent & Stabilizer

To make the desired volume of working solution, dilute END RUN Wetting Agent & Stabilizer superconcentrate 1:99 with water.

For example:

10ml END RUN Wetting Agent Superconcentrate

+ 990ml Water

= 1000ml END RUN Wetting Agent Working Solution

Basic Procedures

Step Procedure Timing Range

Final Water Wash 5 minutes 1-10 minutes END RUN Wetting Agent 1 minute 1-3 minutes

Sponge Dry

Use at the same temperature as other working solutions in the process, 18-30°C / 64.5-86°F. Agitate continuously for the first minute, and then for 10-15 seconds of each minute thereafter. Use only enough working solution in film tanks to cover reels and to leave an air space for thorough agitation with bubbles.

Sponge Squeegeeing

END RUN Wetting Agent & Stabilizer is designed for sponge squeegeeing only. A clean sponge for prints or sponge tongs for films, soaked in working solution and squeezed out, will remove excess solution and foreign matter evenly, leaving only the correct END RUN coating for anti-static protection. Rubber blade squeegees remove too much or all of the END RUN coating and leave no anti-static protection. Finger squeegeeing leaves an uneven or excessive coating.

When sponge squeegeeing, apply only enough gentle even pressure to absorb excess solution. END RUN's lubricating action protects against scratching. Sponge tongs also absorb excess solution from 35mm film sprocket holes, which might otherwise leave streaks.

Drip Dry Method

If sponge squeegeeing is impossible, such as for large sheets of film, END RUN may be used in a different dilution for drip drying without squeegeeing. To mix a working solution, add 3 ml END RUN Wetting Agent & Stabilizer superconcentrate to each liter of water.

For example:

3ml END RUN Wetting Agent Superconcentrate

+ 1000ml Water

= 1003ml END RUN Wetting Agent Drip Dry Working Solution

END RUN Print Brightening Converter

END RUN Print Brightening Converter should be used as an additive to END RUN Wetting Agent & Stabilizer.

Dilute END RUN Wetting Agent & Stabilizer superconcentrate 1:99 with water as directed by instructions for using END RUN Wetting Agent & Stabilizer. To each liter of Wetting Agent working solution, add 1-50 ml END RUN Print Brightening Converter concentrate.

For example:

>10ml END RUN Wetting Agent Superconcentrate

+ 990ml Water

20ml END RUN Print Brightening Converter Concentrate

= 1020ml END RUN Print Brightening Converter Working Solution

The visible effect of brightening varies with the type of paper, water quality, processing methods, and the amount of UV available for reflection in the viewing light source. To compensate for these factors, the strength of the Print Brightening working solution may be adjusted by changing the amount of END RUN Print Brightening Converter concentrate added per liter of END RUN Wetting Agent working solution.

Examples:

For fiber-based prints, add 1-20 ml Converter per liter.

For RC prints, add 10-50 ml Converter per liter.

For some processes, especially non-silver printing on hand-sensitized paper, Print Brightening Converter concentrate may be added to plain water instead of END RUN Wetting Agent working solution. Add 1-20 ml per liter of water. It is good practice to use distilled or deionized water.

Excess Print Brightener may be removed gradually by water washing.

How to Use

After the Final Water Wash, immerse for 1-3 minutes with constant agitation, following the procedure in the instructions for END RUN Wetting Agent & Stabilizer. Sponge squeegee and dry as usual.

BASIC PROCEDURES

Step Procedure Timing Range

Final Water Wash 5 minutes 1-10 minutes

END RUN Print Brightening Converter 1 minute 1-3 minutes
Sponge & Dry

Use at the same temperature as other solutions in the process, 18-30°C / 64.5-86°F.
Agitate continuously for the first minute in working solution, and then for 10-15 seconds of each minute.