

ILFOSPEED FIXER

ILFOSPEED fixer is a non-hardening, rapid fixer supplied in liquid concentrate form. It is convenient to use and is suitable for processing both film and paper. ILFOSPEED fixer contains no sodium thiosulphate, the fixing agent being ammonium thiosulphate.

Mixing Instructions

Dilute one part fixer concentrate with three parts water for use with both film and paper.

The use of a hardening type fixer is not generally required when processing films as most modern emulsions have hardening agents incorporated. Only films being processed at high temperatures require additional hardening.

Fixation

The times given below are the average fixing times for materials in fresh solutions at 20°C.

Material	Fixing Time
Film	2-3 minutes
RC Paper	30 seconds
Fibre-based Paper	30 seconds

Capacity

In order to avoid the risk of insufficient fixation film should remain in the fixer for twice the time the emulsion takes to clear. Fixer should be discarded when the clearing time in used fixer exceeds twice the clearing time in fresh fixer. As a guide approximately 100-120 20 rollfilms may be fixed in 5 litres of working strength fixer. One 120 rollfilm is equivalent to one 36exp. 35mm film, two 20exp. 35mm films or 4 4x5 inch sheet films.

When ILFOSPEED fixer is used with RC papers such as ILFOSPEED AND MULTIGRADE approximately 100 8x10 inch prints may be processed in one litre of working strength fixer.

When ILFOSPEED fixer is used with fibre-based papers such as ILFOSPEED AND GALERIE approximately 40 8x10 doubleweight prints may be processed in one litre of working strength fixer.

The use of a stop-bath such as ILFORD IN-1 between developer and fixer will aid in prolonging the useful life of a fixer.

Fixer Acidity

The pH (acidity) of working strength ILFOSPEED fixer should be in the range of 5.0-5.5. This can be checked readily with narrow range pH papers. If the pH is too high, due to carry-over from the developer bath, a few drops of IN-1 concentrate can be added until the pH value drops. The use of a stop-bath before fixation will help prevent this rise in pH.

Storage

Concentrate ILFOSPEED fixer will keep in good condition for about one year in air-tight containers. Working strength fixer will keep several months in tightly capped bottles.

During use ILFOSPEED fixer will keep about one week in open trays.

ILFOFIX

ILFOFIX is a multi-purpose, acid-hardening fixer supplied in powder form. It yields long life and maximum efficiency where a sodium thiosulphate fixer is required.

Mixing Instructions

To make up the fixer as packed, slowly pour the contents of the pack into about three-quarters of the total volume of warm water at about 25°C, but not above 30°C, and stir until completely dissolved. Add cold water to make up the total volume.

To make one litre of fixer from a 2 litre or larger pack, slowly pour 285g of powder into about 750ml of warm water at about 25°C, but not above 30°C, and stir until completely dissolved. Add cold water to make up one litre.

For film use ILFOFIX undiluted. For paper dilute one part ILFOFIX with two parts water. NOTE: hardening type fixers such as ILFOFIX are not recommended for use with RC papers such as ILFOSPEED and MULTIGRADE as washing efficiency will be impaired.

Fixation

The times given below are the average fixing times at 20°C, for materials in fresh solution.

Material	Dilution	Fixing Time (Min.)
Film	Stock solution	10
Paper	1 + 2	5

Capacity

In order to avoid the risk of insufficient fixation, film should remain in the fixer for about twice the time it takes the emulsion to clear. Fixer should be discarded when the clearing time in used fixer exceeds twice the clearing time in fresh fixer. As a guide approximately 120-125 120 rollfilms may be fixed in 5 litres of fresh fixer. One 120 rollfilm is equal to one 36 exp. 35mm film, two 20exp. 35mm films or four 4x5 sheet films.

When ILFOFIX is used for fixing fibre-based papers such as ILFOSPEED AND GALERIE, it should be discarded after approximately 40 8x10 inch prints have been processed in one working litre of fixer.

Two-Bath Fixation

An efficient method of fixing paper is to use the two-bath method of fixation. Make up two separate fixing baths of the same volume. Fix the prints in the first bath for half the recommended fixing time and then transfer them to the second bath for the remaining time. Continue to work this way until the first bath is exhausted. Discard the first, exhausted bath and replace it by the second. Prepare a completely fresh second bath. Repeat the process as required, with the result that the second bath is always relatively fresh to ensure thorough fixation.

Fixer Acidity

The pH (acidity) of ILFOFIX should be in the range of 4.8-5.5. This can readily be checked with the aid of narrow range pH papers. If the pH is too high due to developer carry-over, a few drops of IN-1 stop bath concentrate may be added until the pH drops. The use of a stop-bath between developer and fixer will help prevent this rise in pH.

Storage

Stock solution ILFOFIX will keep in good condition for about 12 months in full air-tight bottles. In half-full bottles it will keep for about 6 months.

During use ILFOFIX will keep in good condition for about one week in open trays and about one month in deep tanks with floating lids.