

## FACT SHEET

# 2150XL DEVELOPER & FIXER

## LIQUID CONCENTRATE CHEMICALS FOR THE ILFOLAB 2150 RC TABLE TOP PAPER PROCESSOR

### DESCRIPTION

ILFORD 2150XL developer and ILFORD 2150XL fixer are liquid concentrate chemicals supplied as a kit specifically for use with the ILFOLAB 2150 RC table top processor.

2150XL developer and fixer are, economical, easy to use, clean working, robust and have a high print capacity. They are capable of producing superb quality prints from all ILFORD RC papers and the high quality RC papers made by other manufacturers. They are used at a temperature 35°C (95°F).

The ILFOLAB 2150 RC table top processor is a high temperature processing machine for all resin coated, black and white photographic paper in sheet formats, minimum print length 12.7cm (5in), maximum width 50.8cm (20in). It is ideal for users who have small to medium volumes of processing work but needed more capacity than dish/tray processing can provide. The ILFOLAB 2150 RC is easy to use and uncomplicated to install and maintain. It is an unreplenished process system where the chemicals are used to exhaustion. One filling of ILFORD 2150XL developer and fixer will last either two weeks or process the equivalent of 1000 20.3 x 25.4 cm (8 x 10 in) prints, (50m<sup>2</sup>/550 ft<sup>2</sup> of paper). When either limit is reached we recommend that both chemicals are completely replaced. For some applications e.g. when a large number of prints are processed in a short period of time (1 or 2 days) some users may be able to extend the number of prints processed to 1250 20.3 x 25.4 cm (8 x 10 in) prints, (64m<sup>2</sup>/708ft<sup>2</sup> of paper) and still produce an acceptable print quality but optimum print quality will be compromised.

Detailed information about the ILFOLAB 2150 RC processor and working with it is included in the operation manual provided with the processor.

With most neutral tone papers 2150XL developer gives an image colour just slightly cool of neutral. The addition of a developer starter solution is not needed with 2150XL developer.

2150XL fixer is a non-hardening rapid fixer, it must not be used with fix hardeners.

2150XL fixer is not recommended for recycling or reuse as fixing efficiency for this system will be compromised. However before disposal 2150XL fixer can have the silver recovered from it and is compatible with all methods of silver recovery. For maximum efficiency electrolytic methods are recommended.

### Mixing instructions

**Note** Photographic chemicals are not hazardous when used correctly. It is recommended that gloves, eye protection and an apron or overall are worn when handling and mixing all chemicals. Always follow the specific health and safety recommendations on the chemical packaging. Photochemical material safety data sheets containing full details for the safe handling, disposal and transportation of ILFORD chemicals are available from ILFORD agents or directly from the ILFORD web site at [www.ilford.com](http://www.ilford.com).

Working strength 2150XL developer and fixer solutions are automatically mixed for use by the 2150 RC processor.

To fill the processor for the first time lift the lid and prop it open with the support provided. At the front of the machine before the process tanks are two chemical reservoirs the left one is for 2150XL developer, colour coded red, the right one is for 2150 fixer, colour coded green. Do not let developer contaminate the fixer or fixer contaminate the developer.

Remove the cover of the developer reservoir and pour into it the complete contents of one 3 litres bottle of 2150XL developer. Replace the cover. Remove the cover of the fixer reservoir and pour in the complete contents of one 3 litres bottle of 2150XL fixer. Replace the cover, switch on the processor and its water supply and press the water fill button located to the right of the fixer reservoir. Lower the lid of the processor to close it. The chemicals will now be automatically diluted and mixed to working strength and the wash water tank filled.

During the mixing and heating of the solutions the dryer will come on to be warmed to operating temperature. The processor will signal when mixing and warm up has been completed and it is ready to be used. If it is not used immediately it will switch to standby mode.

Between each fill of chemicals we recommend that the 2150 RC processor is rinsed out with water. This is easy to do, drain the used solutions, close the drains and press the water fill button to refill using only water. Allow the machine to go through a mixing cycle, drain and refill with fresh chemicals as described above.

### pH and specific gravity

The following table gives the pH and specific gravity (SG) for fresh, working strength 2150XL developer and 2150XL fixer. These figures were obtained under carefully controlled laboratory conditions and may differ slightly from measurements made by users in their own working areas. Users should make their own control measurements from their own mixed fresh solutions for later comparison. Ideally a pH meter should be

used to measure solution pH but if one is not available pH measurement sticks can be used. These are available in various pH ranges, for the developer those covering the range from pH 9 - pH 11 can be used, whereas for the fixer those covering the range pH 4 to pH 6 are necessary. SG can be measured by using a hydrometer and one covering the range from 1.000 to 1.200 is useful for a wide range of working strength photographic process solutions.

Working strength	pH	SG@ 20°C
2150XL developer	10.35 - 10.45	1.045 - 1.055
2150XL fixer	5.0 - 5.5	1.070 - 1.080

### PROCESSING

The processing sequence of the ILFOLAB 2150 RC processor is develop, fix, wash and dry.

The access time for a dry to dry 20.3 x 25.4 cm ( 8 x 10 in) print is 72 seconds. Its maximum print output is 460 20.3 x 25.4 cm ( 8 x 10in) prints per hour (23m<sup>2</sup>/253ft<sup>2</sup> per hour).

Once filled with chemicals and warmed up the ILFOLAB 2150 RC is always ready to use. To process feed prints in emulsion side down. Feeding a print into the ILFOLAB 2150 RC automatically switches it to working mode and when the last print has left the dryer the ILFOLAB 2150 RC automatically returns to standby mode after a short dryer run down period.

The wash is provided by water flow in a tank of water and a fresh water spray bar. The incoming water temperature must be above 5°C/41°F.

For speed and surface quality all 2150 RC processors are equipped with infra red dryers.

### **THE LIFE OF WORKING STRENGTH SOLUTIONS**

We recommend that working strength 2150XL solutions in use are discarded either after two weeks in the processor or if 50m<sup>2</sup>/550ft<sup>2</sup> has been processed, whichever limit is reached first.

Unused working strength solutions should last for the following time:-

2150XL developer

1 months in full tightly capped container.

2 weeks in a half full tightly capped container.

2150XL fixer

6 months in full tightly capped container.

1 month in a half full tightly capped container.

### **STORAGE**

Full, unopened bottles of 2150XL developer and fixer concentrates stored in cool conditions, 5–20°C (41–68°F), will keep for two years. Keep all bottles tightly sealed until used, once opened use completely.

### **AVAILABILITY AND CAPACITY**

ILFORD 2150XL developer and ILFORD 2150XL fixer are only available as a kit containing one 3 litre bottle of developer and one 3 litre bottle of fixer.

One kit is sufficient for one fill of the ILFOLAB 2150 RC processor and will process the equivalent of 1000 20.3 x 25.4 cm (8 x 10 in) prints (55 m<sup>2</sup>/515 ft<sup>2</sup> of paper).

A wide range of fact sheets is available which describe and give guidance on using ILFORD products. Some products in this fact sheet might not be available in your country