

## FACT SHEET

# ILFORD SFX 200

BLACK AND WHITE CAMERA FILM  
WITH EXTENDED RED SENSITIVITY FOR CREATIVE PHOTOGRAPHY

### FEATURES AND BENEFITS

#### Good red light speed

Increased versatility and creativity

#### Good latitude

Increased first time success

#### Medium white light speed (EI 200/24)

Can be used without filtration

#### Pushes well

Can push up to EI 800/30 (no filter)

#### Easy handling

Not as difficult to load as infra-red films

#### Easy processing

Compatible with all normal developers

#### Quality negatives

Moderate contrast, unlike other extended red films

#### Easy printing

Prints on mid-range paper grades

#### Good sharpness

Distinctive grain with low flare

#### Reliable supply

Readily available throughout the year

### DESCRIPTION

ILFORD SFX 200 is a medium speed black and white camera film for creative photography. It has extended red sensitivity (up to 740nm) and is especially suited for use with a filter to create special effects. Using a deep red filter, for example, skies can be rendered almost black and most green vegetation almost white. Its unusual tonal rendition ensures interesting results for a range of subjects, including portraits, landscapes, townscapes and architecture. SFX 200 also has full panchromatic sensitivity to ensure good pictorial contrast with or without the use of a filter. It has a wide exposure latitude, is compatible with all normal developers and has a wide tonal range.

### AVAILABILITY

SFX 200 is coated on 0.125mm grey acetate base which gives good halation protection. It is available in tubbed 35mm 36 exposure DX cassettes, suitable for all 35mm cameras.

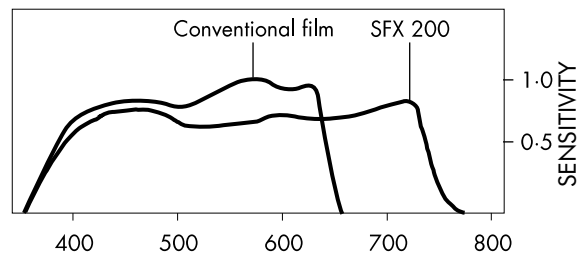
### EXPOSURE RATING

SFX 200 has a speed rating of ISO 200/24° (200ASA, 24DIN, EI 200/24) to daylight. The ISO speed rating was measured using ILFORD ID-11 developer at 68°F with intermittent agitation in a spiral tank.

It should be noted that the exposure index (EI) range recommended for SFX 200 is based on a practical evaluation of film speed and is not based on foot speed, as is the ISO standard.

### SPECTRAL SENSITIVITY

#### Wedge spectrogram to tungsten light (2850K)



SFX 200 has a peak red sensitivity at 720nm and extended red sensitivity up to 740nm.

### USE OF FILTERS

Any yellow, orange or red filter can be used, but the effect will depend on its transmission characteristics. The redder the filter, the more dramatic the effect.

Suggested filters include:

#### Light red

B+W 090, Cokin 003, Hitech 25, Hoya 25A, Kodak Wratten 25, Lee 25 and Heliopan 25. Under some conditions, the effect with these filters can be quite subtle — similar to a normal panchromatic film used with these filters.

#### Dark red

B+W 091, Heliopan 29 and Kodak Wratten 29. These filters give a more dramatic effect than light red filters.

#### Very dark red

B+W 092, Heliopan RG695, Hoya R72 and Kodak Wratten 89B. These filters give an even more dramatic effect than dark red filters. However, exposure times with these filters can be very long, so the use of a tripod is recommended.

Several camera manufacturers also sell similar filters, including Nikon, Canon and Leica.

Filters are available in different forms. This table gives a guide.

| Filter                    | Type                       |
|---------------------------|----------------------------|
| B+W 090, 091, 092         | Glass, screw-in or bayonet |
| Cokin 003                 | Resin                      |
| Helipon 25, 29, RG695     | Glass, screw-in            |
| Hitech 25                 | Resin                      |
| Hoya 25A, R72             | Glass, screw-in or bayonet |
| Kodak Wratten 25, 29, 89B | Gelatin                    |
| Lee 25                    | Polyester or resin         |

**Note** Some of these filters may be available only by special order.

### LOADING THE CAMERA

SFX 200 must be loaded in subdued light. Unlike true infra-red film, it is not necessary to load it in total darkness.

### FOCUSING

With some lenses, red light focuses at a slightly different point to other visible light. With these lenses there may be a focus shift when focusing in white light compared with red light. However, it is almost impossible to focus a camera with a deep

red filter in place.

With short to moderate focal length lenses, this difference can easily be accommodated by stopping down the lens to the smallest workable aperture. Some lenses, particularly apochromatic (APO) designs, may need no correction.

### EXPOSURE

A certain amount of experimentation is needed when first using this film. As a guide, bracket exposures by  $\pm 2$  stops from the TTL reading with the filter in place or the meter reading with the filter factor applied.

**Note** The TTL metering on some cameras can under expose by up to  $1\frac{1}{2}$  stops with deep red or orange filters in place.

If you want to check the TTL metering system on your camera before starting, set the metering system of the camera to EI 200/24 and, with your filter in place, make a series of exposures up to  $\pm 2$  stops from the indicated exposure. After processing decide which is the best negative and re-set the camera if necessary.

### CHOOSING THE BEST ILFORD DEVELOPER FOR THE JOB

#### Manual processing (e.g. spiral tank, deep tank) and rotary processors

|   | Liquid                   | Powder                         |
|---|--------------------------|--------------------------------|
| Best overall image quality at meter setting |                          |                                |
| EI 200/24                                   | ILFOTEC HC (1+31)        | ID-11 (stock)                  |
| EI 400/27                                   | ILFOTEC HC (1+31)        | ID-11 (stock)                  |
| EI 800/30                                   | ILFOTEC HC (1+31)        | ID-11 (stock)                  |
| Finest grain                                | ILFOTEC HC (1+15)        | PERCEPTOL                      |
| Maximum sharpness                           | ILFOSOL S                | ID-11 (1+1)                    |
| Maximum film speed                          | ILFOTEC HC (1+15)        | MICROPHEN (stock)              |
| One-shot convenience                        | ILFOSOL-S                | ID-11 (1+1)                    |
| Economy                                     |                          | ID-11 (1+1)<br>MICROPHEN (1+1) |
| Rapid processing                            | ILFOTEC HC (1+15)        |                                |
| Replenishable                               | ILFOTEC HC<br>ILFOTEC DD |                                |

#### Machine processing

|                  |                                |   |
|------------------|--------------------------------|---|
| Dip and dunk     | ILFOTEC DD<br>ILFOTEC HC       | Best overall image quality (liquid) and long tank life<br>Flexible process time, range of dilutions and economy |
| Leader card      | ILFOTEC RT RAPID<br>ILFOTEC HC | Rapid processing, best overall image quality and long tank life<br>Range of dilutions, flexibility and economy  |
| Roller transport | ILFOTEC RT RAPID               | Rapid processing  |

**PROCESSING**

SFX 200 can be processed in all types of processing equipment including spiral tanks, rotary processors, deep tanks and automatic processors. Standard capacity figures and replenishment rates can be maintained. SFX 200 is very robust in processing and will tolerate less than ideal processing conditions. Also, it will not contaminate the processing chemicals.

**Development times**

The table gives development times for both manual and machine processing. These times will produce negatives of average contrast suitable for printing in all enlargers. The development times are intended as a guide and may be altered if a different result is needed. For manual processing in spiral tanks and deep tanks, the development times are based on intermittent agitation. Where continuous agitation is used, reduce these times by up to 15%.

Alternatively, if using a pre-wet, use the development times for spiral tank processing as a guide.

**Note** Development times may need adjusting to suit individual exposing conditions, processing systems and working practices. Adjust the recommended development times until the desired contrast level is obtained. Development times in other manufacturers' developers are included for your convenience and are only a general guide. Adjust these times, if necessary, to suit your requirements. Other manufacturers can and do change their product's specifications from time to time and the development times may change as a result.

**Development times****Spiral tank, deep tank, dip and dunk machines (min/68°F)**

|                      | Dilution | Meter setting |           |           |
|----------------------|----------|---------------|-----------|-----------|
|                      |          | EI 200/24     | EI 400/27 | EI 800/30 |
| ILFORD developer     |          |               |           |           |
| ILFOSOL S            | 1+9      | 9½            | 11½       | 19        |
|                      | 1+14     | 13            | 19        | —         |
| ILFOTEC HC           | 1+15     | 5             | 7         | 10½       |
|                      | 1+31     | 9             | 13        | 19        |
| ID-11                | stock    | 10            | 14        | 18        |
|                      | 1+1      | 17            | —         | —         |
| MICROPHEN            | stock    | 8½            | 10½       | 14½       |
|                      | 1+1      | 15½           | 19        | —         |
| PERCEPTOL            | stock    | 14½           | —         | —         |
|                      | 1+1      | 20            | —         | —         |
| Non-ILFORD developer |          |               |           |           |
| Kodak D-76           | stock    | 10            | 12½       | 16½       |
|                      | 1+1      | 14½           | —         | —         |
| Kodak T-Max          | 1+4      | 8½            | 10½       | 12½       |

**Dip and dunk machines (min/75°F)**

|                |       |   |   |   |
|----------------|-------|---|---|---|
| ILFOTEC DD     | 1+4   | 7 | 8 | 9 |
| Kodak T-Max RS | stock | 6 | 7 | 9 |

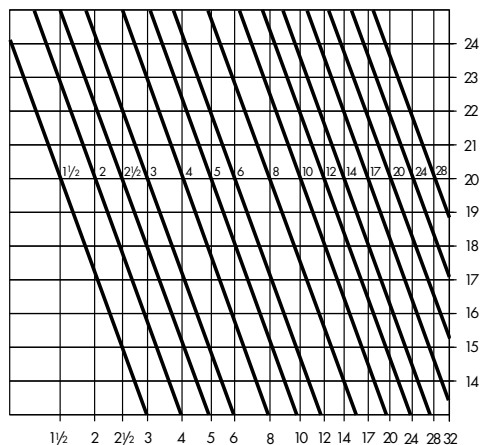
**ILFOLAB FP40, roller transport and leader card machines (sec/78.8°F)**

|                  |              |     |     |     |
|------------------|--------------|-----|-----|-----|
| ILFOTEC RT RAPID | standard mix | 100 | 135 | 200 |
| Kodak Duraflo RT | stock        | 100 | 135 | 200 |

### Processing at different temperatures

SFX 200 film can be processed over a range of temperatures. Development times at temperatures other than 68°F may be calculated from the chart below.

For example, if 4 minutes at 68°F is recommended, the time at 73°F will be 3 minutes and the time at 61°C will be 6 minutes.



### Fixing

After development, rinse the film in water or an acid stop bath (ILFORD IN-1) and fix in ILFORD UNIVERSAL RAPID Fixer (1+3) for 2–4 minutes at 68°F. A hardener is recommended only when processing at high temperatures (above 86°F) or in a roller transport processor.

### Washing

Where a non-hardening fixer, such as UNIVERSAL RAPID Fixer, has been used, wash the film in running water for 5–10 minutes at a temperature within 10°F of the processing temperature.

For spiral tank use, when a non-hardening fixer has been used, the following method of washing is recommended. This method of washing is faster, uses less water yet still gives negatives of archival permanence.

- 1 Process the film in a spiral tank.
- 2 Fix it using UNIVERSAL RAPID Fixer
- 3 After fixing, fill the tank with water at the same temperature as the processing solutions, and invert it five times.
- 4 Drain the water away and refill. Invert the tank ten times.
- 5 Drain and refill the tank for the third time and invert it twenty times. Drain the water away.

A final rinse in water to which ILFORD ILFOTOL Wetting Agent (1+200) has been added will aid rapid and uniform drying.

### Drying

To avoid drying marks, use a clean squeegee or chamois cloth to wipe SFX 200 film before hanging it to dry. Dry SFX 200 at 86–104°F in a drying cabinet or at room temperature in a clean dust-free area.

### PRINTING

SFX 200 negatives can be printed in a similar way to conventional panchromatic films. However, because of the shift in relative tonal values a degree of experimentation may be necessary to get the desired result.

The range of ILFORD MULTIGRADE variable contrast papers is particularly recommended.

### STORAGE

Store SFX 200 in a cool (50–68°F), dry place in its original packaging.

### Exposed film

Once exposed, process SFX 200 as soon as practical. Images on exposed but unprocessed film will not degrade during normal working periods, that is, up to one month when stored as recommended.

### Negatives

Store processed negatives in a cool (50–68°F), dry place, in the dark. Suitable storage sleeves include those made of cellulose triacetate, Mylar or paper (pH 6.5–7.5) or inert polyester.

ILFORD may modify its products from time to time and consequently the information given in this publication is subject to change without notice.

### For further information contact:

ILFORD PHOTO  
West 70 Century Road  
P.O. Box 288  
Paramus, New Jersey 07653  
(201) 265-6000

ILFORD ANITEC (CANADA) LIMITED  
2751 John Street  
Markham, Ontario  
Canada L3R 2Y8  
(905) 940-4455

Names printed in capitals are ILFORD trademarks. Kodak and Wratten are trademarks of Eastman Kodak Company.