

NEOPAN SS (135)

1. FEATURES AND USES

An easy to use medium speed, fine grain, orthopanchromatic film providing the ample gradation and wide exposure latitude that is ideally suited to taking pictures under any light conditions, indoors and outdoors.

2. FILM SIZES, BASE MATERIAL AND THICKNESS

135	24- and 36-exp.	Triacetate tinted base, 0.127mm thick
35 mm	30.5 m (100 ft), darkroom loading type	

3. SPEED

ISO 100/21°

4. COLOR SENSITIVITY

Orthopanchromatic

5. EXPOSURE GUIDE

To obtain the best photographic results, correct exposure is indispensable, and for correct exposures the use of an exposure meter is recommended. If an exposure meter is not available, as a guide use the exposures suggested in the table below.

Exposure Guide Tables (Exposure at ISO 100)

Light Conditions	Seashore or Snow Scenes under Bright Sun	Bright Sunlight	Cloudy Bright	Cloudy Day or Open Shade	Indoor Home Scene at Night and Lighted Night Scenes
Lens Aperture	f/16	f/11	f/8	f/5.6	f/2 to 2.8
Shutter Speed (sec.)	1/250	1/250	1/125	1/125	1/8

Flash Exposures

When electronic flash exposures are to be made, use the shutter speeds designated for the particular camera involved. The lens aperture for electronic flash exposure is determined from the particular flash unit guide number, using the formula given below.

$$\text{Lens Aperture (f-number)} = \frac{\text{Guide Number (ISO100)}}{\text{Flash-to-Subject Distance (meters or feet)}}$$

When an automatic electronic flash unit is employed, it should be set at an ISO 100. Electronic flash is, in the same manner as flashbulb photography, dependent on the reflectivity of the surroundings. Observe the electronic flash unit instructions.

Filter Recommendations

When a filter is to be used, multiply the normal exposure by a proper filter using the table below as a guide.

Filter	Fuji Filter*	SC-39 (UV)	SC-48 (yellow)	SC-56 (orange)	SC-60 (red)
	Wratten Filter	No. 1A	No. 8	No. 21	No. 25
Filter Factor	Daylight	1.0	2.0	4.0	8.0
	Tungsten	1.0	1.5	3.0	6.0

6.

SAFELIGHT

Handle the film in total darkness. If a safelight is required, a Fuji Safelight Filter SLG-4* (dark green) with a 20 watt bulb may be used at a distance not less than 1 meter (3.3 feet). In such cases, use the safelight durations that are short as possible and towards the end of the development period.

NOTE * Fuji Filters are available in some countries.

7.

PROCESSING

(1) Development

Processing times and temperatures for development are shown below. To prevent the appearance of development marks and assure uniform finish, agitate the developer continuously for the first minute and for five seconds every minute thereafter.

• Development Conditions (Small Tank Processing)

Agitation: Agitate continuously for the first minute and five seconds every minute thereafter.

Unit: minutes

Developer	Temp. EI*	18°C (64°F)	20°C (68°F)	22°C (72°F)	24°C (75°F)	26°C (79°F)
Microfine**	100	11 1/2	9 1/2	8 1/4	6 1/2	5 1/2
Microfine (1:1)	100	13 1/2	11 1/2	10	8 1/2	7 1/2
Fujidol E**	100	7 1/2	6 3/4	5 3/4	5	4 1/2
	200	8 1/4	7 1/4	6 1/2	5 1/2	5
Fujidol E (1:1)	100	8 1/2	7 1/2	6 1/2	5 3/4	5
SPD** (Super Prodol)	200	6	5	4 1/2	3 3/4	3 1/4
	400	10 1/2	9	7 3/4	6 1/2	5 1/2
SPD(1:1)	100	8	7	6	5 1/4	4 1/2
	200	8 3/4	7 1/2	6 1/2	5 3/4	5

* EI (Exposure Index) is the exposure determination designator and the camera or exposure meter ISO speed should be set to this value.

NOTE ** Fuji chemicals are available in some countries.

Non-Fuji Film Developer Processing

Unit: minutes

Developer	Temp. EI	18°C (64°F)	20°C (68°F)	22°C (72°F)	24°C (75°F)	26°C (79°F)
D-76	100	7 3/4	6 3/4	5 3/4	4 3/4	4
	200	8 3/4	7 1/4	6 1/4	5 1/4	4 1/2
D-76(1:1)	100	9 1/2	8 1/4	7 1/4	6 1/4	5 1/2
	200	10 1/2	9	7 3/4	6 3/4	6
Microdol-X	100	8	7	6	5 1/2	4 3/4
Microdol-X (1:1)	100	9 3/4	8 1/2	7 1/2	6 1/2	5 3/4
HC-110 (Dil.B)	200	7 3/4	6 1/4	5 1/4	4 1/4	3 1/2
T-MAX Developer	200	6 1/4	5 1/2	4 3/4	4 1/4	3 3/4
	400	10	8 1/2	7 1/2	6 1/2	5 3/4
T-MAX RS Developer	200	6 1/2	5 1/2	4 3/4	4	3 1/2
	400	9 3/4	8	7	5 3/4	5
Xtol	100	7	6	5 1/4	4 1/2	3 3/4
	200	7 1/2	6 1/2	5 1/2	4 3/4	4
ID-11	100	6 1/4	5 1/2	4 1/2	3 3/4	3 1/4
	200	7	6	5	4 1/4	3 3/4
	400	10	8 1/2	7 1/4	6	5
Perceptol	100	11 1/2	9	7	5 1/2	4 1/4
ILFOTEC LC 29 (1:19)	100	6	5	4 1/4	3 1/2	NR
	200	7 1/4	6	5	4 1/4	3 1/2
Acufine	200	4 1/4	3 1/2	3	NR	NR
	400	6	5	4 1/4	3 1/2	NR

NR: Not Recommended

NOTE • The (1:1) and (1:19) parenthetical expressions contained in the above table indicate the amount of water dilution in terms of 1 or 19 part water to one part developer. Those locations where there are no such parenthetical expressions indicate processing in the developer stock solution without dilution.

• Deep Tank Development Conditions (Temperatures and Times)

When deep tanks are used, development times should be extended by 5 to 10%, compared to those used with small tanks.

Unit: minutes

Developer	Processing Temperature	18°C (64°F)	20°C (68°F)	22°C (72°F)	24°C (75°F)
Minidol*		9	7	5 1/2	4
Finedol*		10	8	6 1/2	5
Super Finedol*		7 1/2	6	5	4
D-76		9	7	6	5

(2) Stop Bath

For the stop bath a 1.5% acetic acid solution is recommended. Immerse the film in the bath at 15 to 25°C (59 to 77°F) for 20 to 30 seconds while agitating.

(3) Fixing

Fujifix* or Super Fujifix* is recommended. The recommended fixing times at 15 to 25°C (59 to 77°F) are shown below. The required fixing time is twice the time it takes for the film to become clear. In order to avoid the lack of fixing uniformity and to prevent film staining, agitate the fixing solution continuously for the first 30 seconds.

Fixer	Type	Fixing Time (min.)
Fujifix	Acid hardening fixer corresponding to F-8	10
Super Fujifix	Acid hardening rapid fixer	3 to 5

(4) Washing

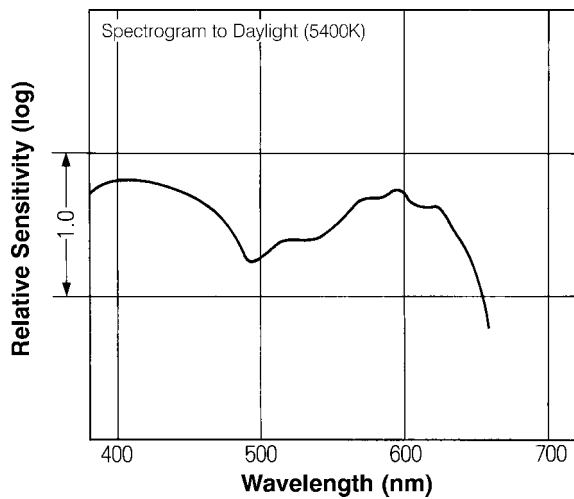
Wash the film in running water for 20 to 30 minutes. To reduce the washing time, the use of Fuji QW* (quick washing agent) is recommended. When using Fuji QW, pre-wash the film for about 30 seconds, immerse it in Fuji QW solution for 1 minute, and wash it in running water for 5 minutes. The required wash water temperature is 15 to 25°C (59 to 77°F).

(5) Drying

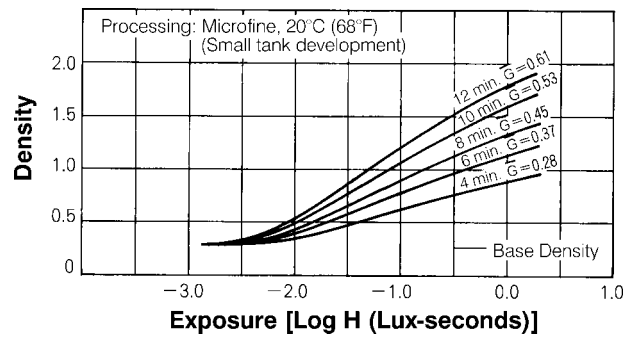
After washing, wipe both sides of the film with a sponge, immerse it in a 1-to-200 solution of Fuji Driwel* for 30 seconds and hang it up to obtain uniform drying. For natural drying, hang the film in a well-ventilated dust free location.

NOTE * Fuji chemicals are available in some countries.

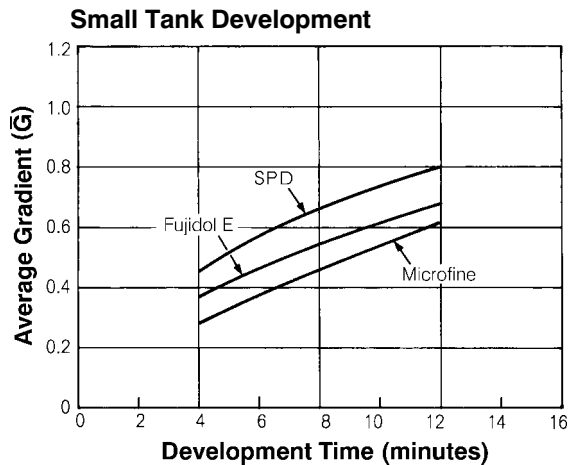
8. SPECTRAL SENSITIVITY CURVE



9. CHARACTERISTIC CURVES



10. TIME- \bar{G} CURVES



NOTICE The data herein published were derived from materials taken from general production runs. However, as Fujifilm is constantly upgrading the quality of its products, changes in specifications may occur without notice.