

## FUJICOLOR INTERNEGATIVE FILM IT-N

### FEATURES AND USES

FUJICOLOR INTERNEGATIVE FILM (IT-N) is a color sensitive material designed for the production of negatives from color transparencies derived from Fujichrome series films and other color films. This material is balanced for exposure with 3200 K tungsten light sources and is designed for exposure times of between 5 and 20 seconds.

Tonal range is adjustable through color compensating filters in conjunction with exposure time variations.

- **Excellent Color Balance and Fine Grain Quality**  
Retaining excellent color balance this film also provides high and low sensitivity ultra fine grain based on the Fujifilm developed DSG (Double Structure Grain) and HUG (Hi-sensitivity Ultrafine Grain) technologies.
- **Opulent Color Reproduction and Excellent Sharpness**  
With the use of the Super DIR and L couplers, the interlayer effects have been highly improved for luxuriant color reproduction and excellent sharpness.
- **Pure Color Reproduction**  
By matching the spectral sensitivity characteristics of color transparency dyes with those of the color internegative film, pure color reproduction is made possible.

All these combine to make this film the best choice in providing the negative quality needed for producing the highest quality display prints, transparencies, and high magnification enlargements.

For color print production purposes, intermediate negatives made from this film can be used for printing on FUJICOLOR and comparable color papers. For display transparency enlargements, these same intermediate negatives may be printed on FUJITRANS DISPLAY MATERIAL or other comparable display films.

### FILM SIZES AVAILABLE

Sheets	4 × 5 in (10 × 12.5 cm)	10 sheets, 50 sheets
	8 × 10 in (20.3 × 25.4 cm)	10 sheets, 50 sheets
	20 × 24 in (50.8 × 61.0 cm)	10 sheets
Roll	35mm × 30.5m (100 ft)	

### SPEED

This film retains about the same speed as other similar materials. Since this product is designed for professional lab use, ISO film speeds are not published.

**EXPOSURE DETERMINATION** This film is to be used with enlargers containing 3200 K tungsten light sources or with other suitable exposure devices. The standard enlarger exposure time for this film is 10 seconds with photographic compensations being allowed through exposure time variations over a 5 to 20 second range.

Basic internegative production exposure conditions are determined first through the use of a gray step wedge and printing takes place from the derived internegative under standardized exposure conditions. These standard conditions are adjusted as necessary after inspecting derived prints. Said adjustments are made through the use of color compensating filters and exposure time variations. For further details see the brochure "Exposure Condition Determination for FUJICOLOR INTERNEGATIVE FILM IT-N."

**FILM HANDLING**

- Film should be exposed before the expiration date indicated on the film package and processed promptly.
- Film that has been placed in cold storage should be allowed to stand for at least one hour after removal to reach room temperature. If the film package is opened before the room temperature is reached, condensation will degrade the film.
- Film must be handled in total darkness without the benefit of safe lighting.

**FILM STORAGE** Unprocessed Film Storage  
When exposed or unexposed film is stored under high temperature and humidity conditions, it will not only sustain changes in such photographic properties as film speed and color balance but also physical changes. To avoid such problems, care should be exercised as suggested below.

- Storage Locations and Temperatures
  - Refrigerator : below 10°C (50°F)
  - Extended Term Storage
  - Freezer :below 0°C (32°F)

#### Processed Film Storage

Processed films are subject to color fading and discoloration from light (especially ultraviolet rays), high temperatures and humidity. To avoid the adverse effects of light, heat and moisture, it is recommended that processed film should be kept in mounts or sleeves and stored in dry, cool and dark locations where there is good ventilation.

- Recommended Storage Conditions
  - Temperatures : below 25°C (77°F), Humidities: 30 to 60% RH
  - Extended Duration Conditions
  - Temperatures : below 10°C (50°F), Humidities: 30 to 50% RH

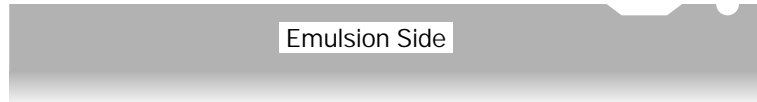
- Avoid direct sunlight and store the film in a dark place.

**NOTE** As with all color dyes, those used in this film will discolor or fade with time.

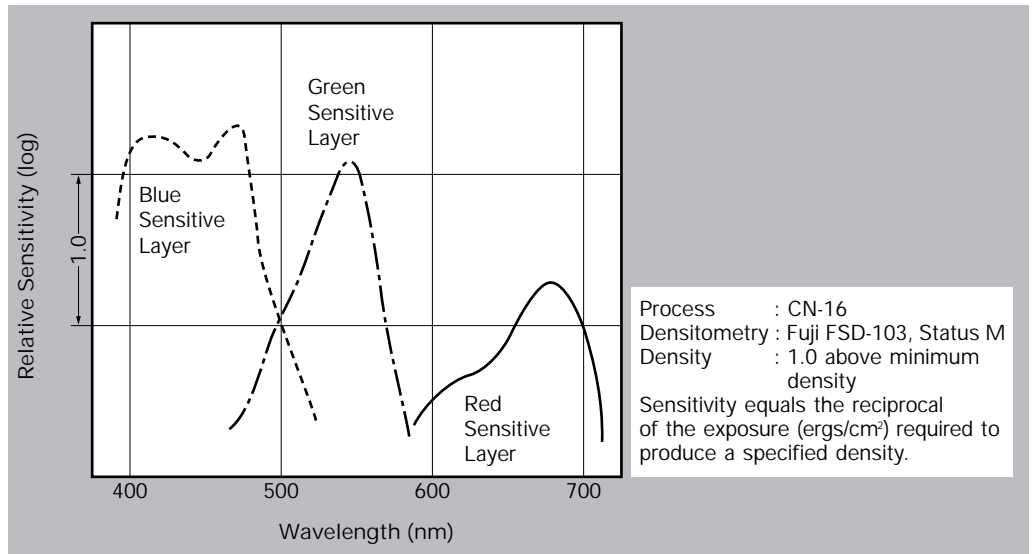
**PROCESSING** This film is intended for processing in Fuji CN-16, C-41, or equivalent chemistries. Processing conditions (temperature, time, agitation, circulation, and basic replenishment rates) are the same as for current color negative films and apply without modification.

SHEET FILM  
CODE NOTCH

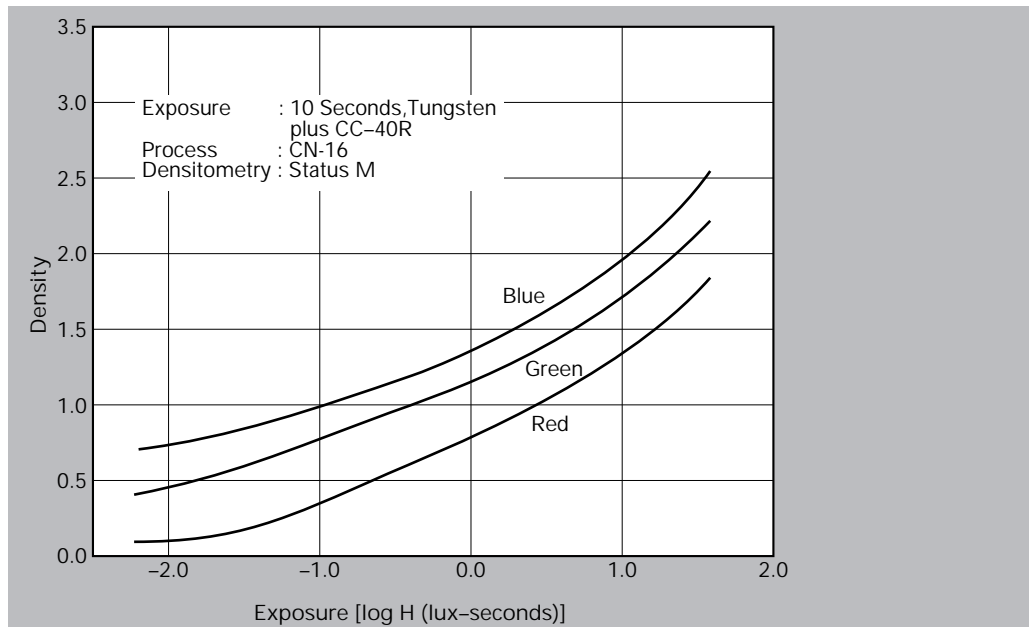
A code notch is cut into the sheet film edge for differentiating sheet film under total darkness conditions. When sheet film is placed so that the code notch is located in the upper righthand corner, emulsion side will be facing forward.



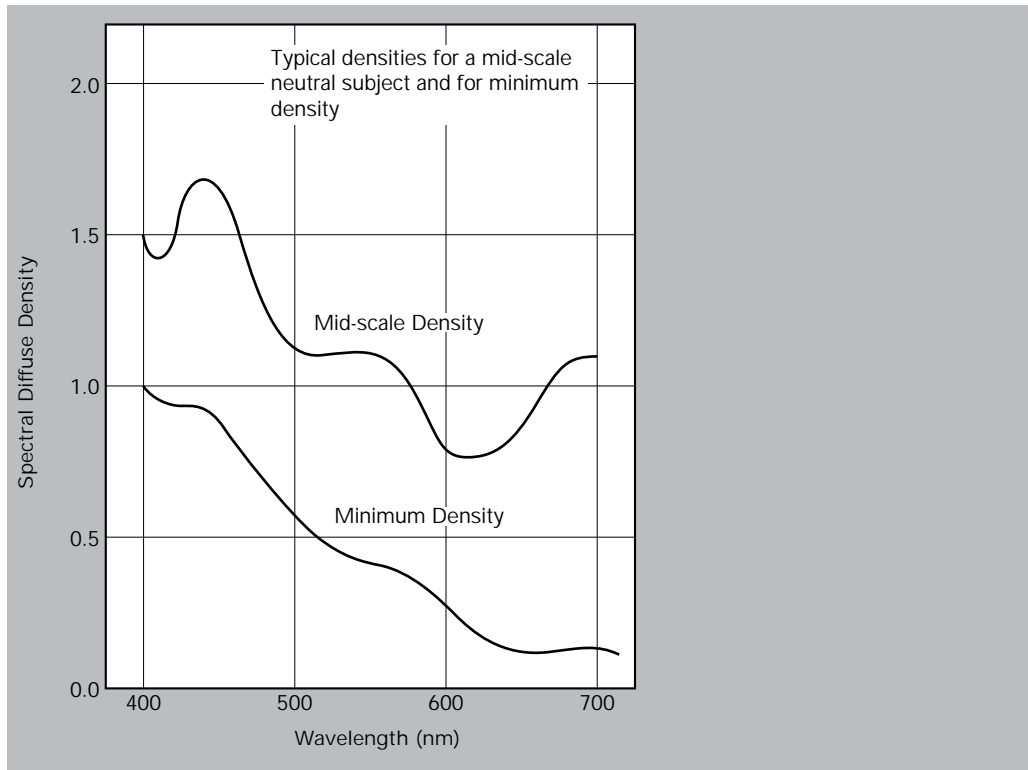
SPECTRAL  
SENSITIVITY  
CURVES



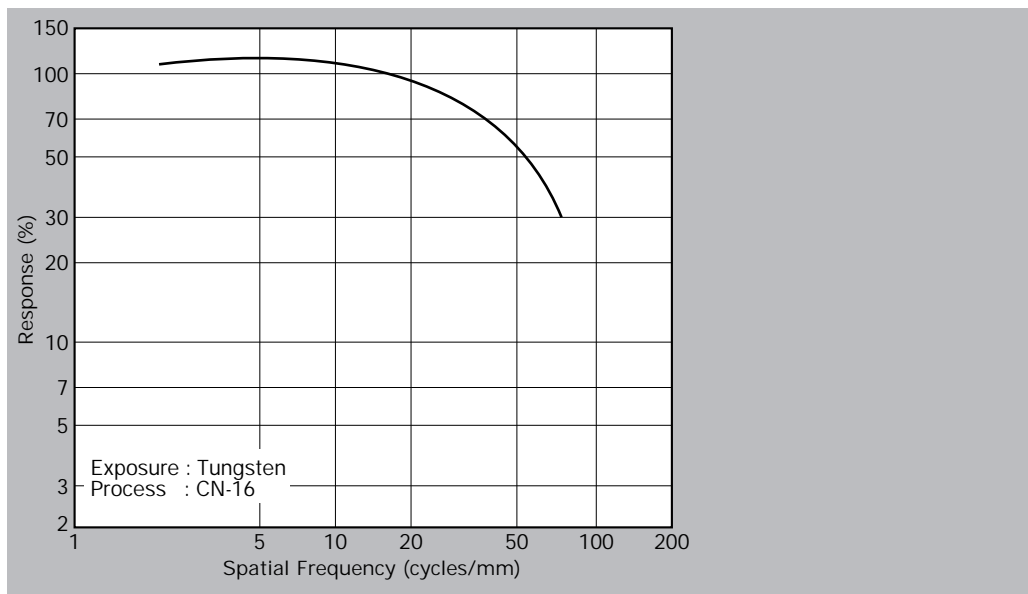
CHARACTERISTIC  
CURVES



SPECTRAL DYE DENSITY CURVES



MTF CURVE



DIFFUSE RMS GRANULARITY VALUE	3 Micro-densitometer measurement aperture: 48 $\mu$ m in diameter Magnification: 12x Measured sample density: 1.0 above minimum density
RESOLVING POWER	Test-object contrast: 1.6:1 — 80 lines/mm Test-object contrast: 1000:1— 160 lines/mm

**NOTICE**

The sensitometric curves and other data herein published were derived from particular materials taken from general production runs. As such they do not represent in exact duplication the characteristics of every lot produced nor a standard for FUJIFILM products. Further, FUJIFILM is in a constant process of upgrading quality which may result in data changes.