

FUJICOLOR NHGII 800 PROFESSIONAL [NHGII] (Daylight)

1. FEATURES AND USES

FUJICOLOR NHGII 800 PROFESSIONAL [NHGII] is an ISO 800-rated, daylight-type color negative film designed especially for indoor and outdoor portrait and wedding photography.

Incorporating the latest Fujifilm technologies, this film is able to meet the wide-ranging demands of photographers working in these fields.

Features	Results
<ul style="list-style-type: none"> • High Speed of ISO 800 	<ul style="list-style-type: none"> • Accurate ISO 800 rating for versatility and superb results
<ul style="list-style-type: none"> • Smooth Skin Tone Reproduction 	<ul style="list-style-type: none"> • Natural skin tones in portrait and wedding photography where skin tone is of utmost importance
<ul style="list-style-type: none"> • Excellent Color Saturation 	<ul style="list-style-type: none"> • Enhanced color saturation level designed for superb results both in low light situations and normal lighting conditions
<ul style="list-style-type: none"> • Fine Grain Equal to ISO 400 	<ul style="list-style-type: none"> • Fine grain performance allows finely detailed enlargements to be made with confidence
<ul style="list-style-type: none"> • Rich Gradation and Uniform Gray Balance 	<ul style="list-style-type: none"> • Fine detail in highlights and shadows • Neutral tone over entire density range
<ul style="list-style-type: none"> • Wide Exposure Latitude 	<ul style="list-style-type: none"> • Good results in case of over and under exposures
<ul style="list-style-type: none"> • Standard C-41-type Process 	<ul style="list-style-type: none"> • Can be processed with any manufacturer's standard C-41-type chemicals

2. SIZES, BASE & EMULSION NUMBER

Film Size	Base Thickness	Base Material	Emulsion Number
120	3.9 mil.	Cellulose Triacetate	#064~
220	3.9 mil.		

3. EXPOSURE

- The table below will provide recommendations which will yield the best results when bracketing is not carried out. The film speed shown is the effective speed when filters are used.

Light Condition	Film Speed	Filter
Daylight or Electronic Flash	ISO 800/30°	NONE
Tungsten (3200K)	ISO 200/24°	Wratten 80A*
Photolamp (3400K)	ISO 250/25°	Wratten 80B*

*Kodak Filter

• Exposure Determination without an Exposure Meter

The recommendations in the table below should be used two hours after sunrise and two hours before sunset whenever possible.

Daylight Exposure Guide

Light Conditions	Seashore or Snow Scenes Under Bright Sun	Bright Sunlight	Hazy Sunlight	Cloudy	Cloudy Day or Open Shade
Lens Aperture	f/22	f/16	f/16	f/11	f/8
Exposure Time (sec.)	1/1000		1/500		

- NOTE**
- The use of an exposure meter is highly recommended in cloudy weather or in open shade as light conditions continually change.
 - Back lit and close up subject exposures should be increased by one to two stops.
 - A Kodak No. 1A UV absorbing filter is recommended for snow, mountain, or distant landscape scenes.

Low Light Exposure Guide

Light Conditions	Indoor Sports & Night Games	Nighttime Indoor Scenes (under fluorescent light)	Evening Scenes	Night Scenes
Lens Aperture	f/2.8 to 5.6	f/2.8 to 4	f/4 to 5.6	f/2.8 to 4
Shutter Speed (sec.)	1/125	1/30	1/60	1/30

4. EXPOSURE UNDER VARIOUS LIGHTING SOURCES

Since this film is designed as a daylight type, there is no need for filtering when the subject is exposed under natural daylight conditions. Even when exposed under early morning and evening twilight conditions, filtering is generally not necessary as correction is carried out during printing.

Electronic Flash

- Since electronic flash characteristics are similar to daylight, no filters are required. Effective light output and color balance will differ with the equipment type, age, color temperature and other factors. This will require making initial tests.
- With shutter speeds slower than 1/60 of a second, the influence of non-flash light sources such as modeling lamps and room illumination may cause undesirable color balance shifts. Test exposures are recommended.
- Adjust the lens opening for electronic flash according to the following formula;

$$\text{Aperture} = \frac{\text{Lens} \quad \text{ISO 800 Electronic Flash Guide Number}}{\text{Electronic Flash-to-Subject Distance (in Meters)}}$$

- The film speed should be set at the ISO setting currently being used for ISO 800 rated film.
- Since the amount of light reflected onto the subject from surrounding surfaces will differ with conditions, refer to the instructions for the flash unit.

Fluorescent Lamps

This film will provide the best results when exposed to fluorescent and H/D lamps by applying the filter and exposure recommendations listed below. Fluorescent and H/D lamps are subject to color and brightness variations during alternating-current cycles.

To avoid this variability under these lighting conditions, expose NHGII at speeds longer than 1/125 sec. Test exposures are always recommended for determining the appropriate filtration and exposure.

Fluorescent Lamp Type	Daylight (D)	Cool White (CW)	White (W)	Warm White (WW)	Deluxe White Mercury	Clear Mercury
Color Compensating Filters	30R	20M	10C+20M	30B	20M+10R	70R
Exposure Corrections	+1 Stop	+2/3 Stop	+2/3 Stop	+1 Stop	+2/3 Stop	+2 Stops

If the fluorescent lamp type is unknown, use a 30M cc filter and a +1 stop exposure correction. This will provide acceptable results under most conditions.

5. LONG AND SHORT EXPOSURES

No exposure or color balance compensation is required when exposure time is within a 1/4000 to 1/10 second. However for exposures of 1 second or longer, exposure compensation is required.

Exposure Time (sec.)	1/4000 to 1/10	1	10	100
Color Compensating Filter	None	None	None	None
Exposure Corrections (Lens Opening)	None	+ 1/2 stop	+ 1½ stop	+2½ stop

6. FILM HANDLING

To insure high quality results, NHGII like all professional films requires proper handling prior to and after exposure.

- When traveling, manual film inspection at airports is advisable due to the wide variety of X-Ray equipment in use.
- Allow sufficient time for refrigerated films to reach room temperature before use.
- Load and unload films in subdued light.
- Do not subject unexposed or exposed film to high temperature or humidity.
- Process promptly after exposure.
- Do not use a safelight. Handle unprocessed film in total darkness.

7. FILM STORAGE

Unprocessed Film

Unexposed film should be stored at 10°C (50°F) or below in factory sealed packaging.

Processed Film

Processed film should be placed in protective envelopes and stored in a cool, dark, and dry location.

• Recommended Storage Conditions

- Temperature: Below 25°C (77°F), Humidity: 30 to 60% RH
- Extended Duration Conditions Temperature: Below 10°C (50°F), Humidity: 30 to 50% RH

NOTE

Even though this film reaches new highs in long term dye stability, as with all color dyes, those used in this film will fade with time.

8. PROCESSING

This film is designed for standard C-41-type processing chemicals. Equivalent chemicals from other manufacturers should also produce the expected results.

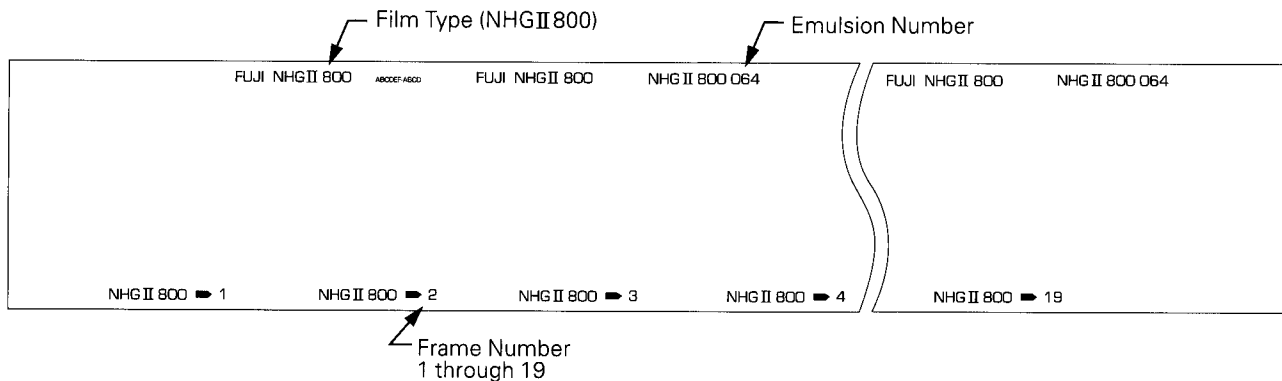
9. NEGATIVE EXPOSURE EVALUATION

The accuracy of exposure can be estimated through the use of an electronic densitometer equipped with Status M filters. An exposure of an 18% gray card receiving the same illumination as the subject, should provide density readings in the range of 0.85 to 1.05. These densities only apply to film which has been exposed according to the above and processed correctly.

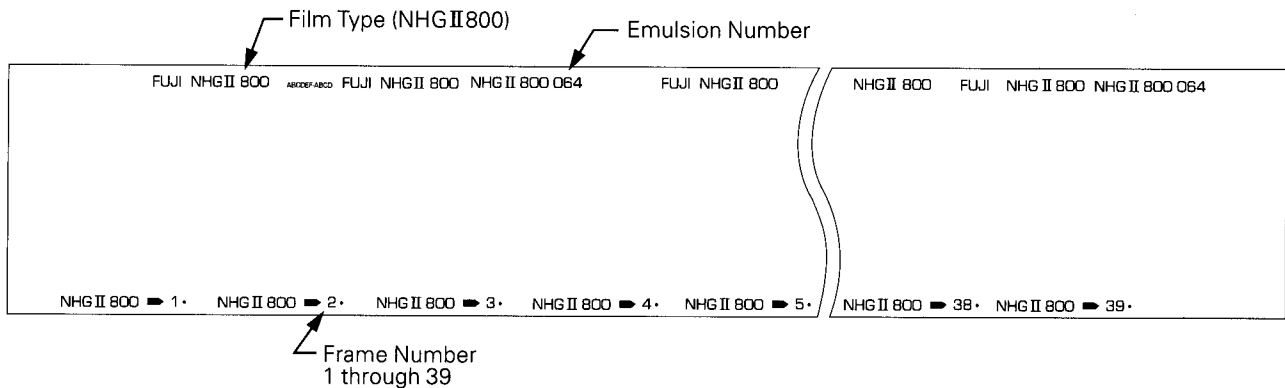
10. IDENTIFYING FILM

It may be necessary to segregate NHGII from other color negatives when utilizing the many different analyzers and printers. The following markings identify NHGII films.

120 Size Film



220 Size Film



11. VIDEO ANALYZING

A separate channel set-up is recommended for the analyzer. Excellent results are attainable on the Kodak PVAC*, Bremson CVIS** and other analyzers. Starting values and Set-up and Balancing manuals are available. Please contact your local Sales or Technical Representative for these items.

- * PVAC is a registered trademark of the Eastman Kodak Company
- ** CVIS is a registered trademark of Bremson Data Systems

12. PRINTING

Color prints can be made by contact printing or enlarging on FUJICOLOR and other professional printing materials.

13. RETOUCHING

Conventional retouching techniques will work well with this film. For more information on retouching please refer to the FUJI PROFESSIONAL RETOUCHING GUIDE (Ref. #02408100) and or the FUJI PROFESSIONAL WORKBOOK AND VIDEO (Ref. #02408200) available through local Professional Product Dealers and Stockhouses.

14. DIFFUSE RMS GRANULARITY 5

Micro-Densitometer Measurement Aperture:
48µm in diameter.

Magnification: 12 X.

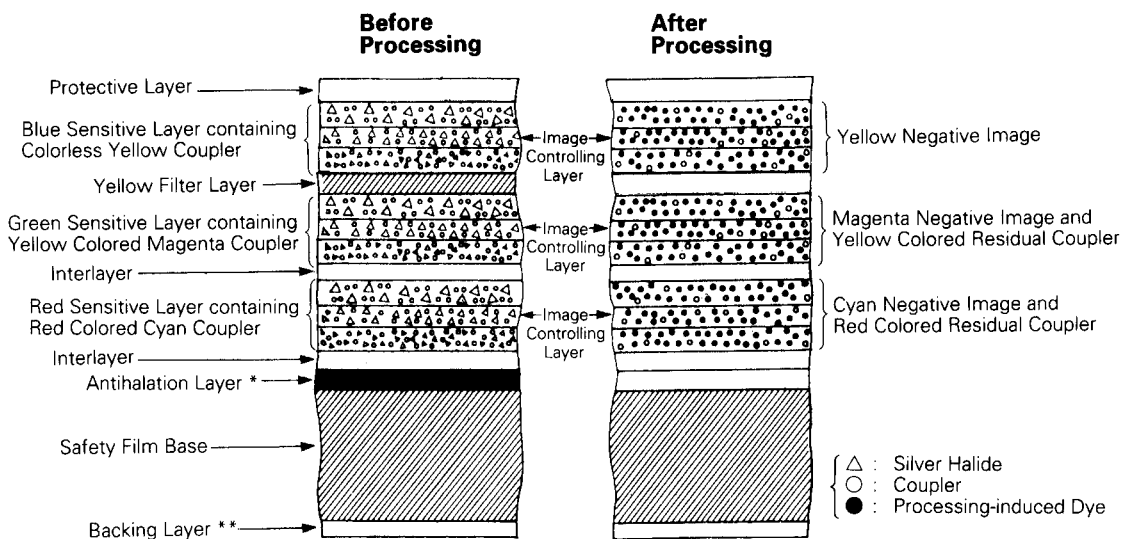
Measured Sample Density (NETA): 1.0.

15. RESOLVING POWER

Test Object Contrast 1.6:1 **50** lines per mm

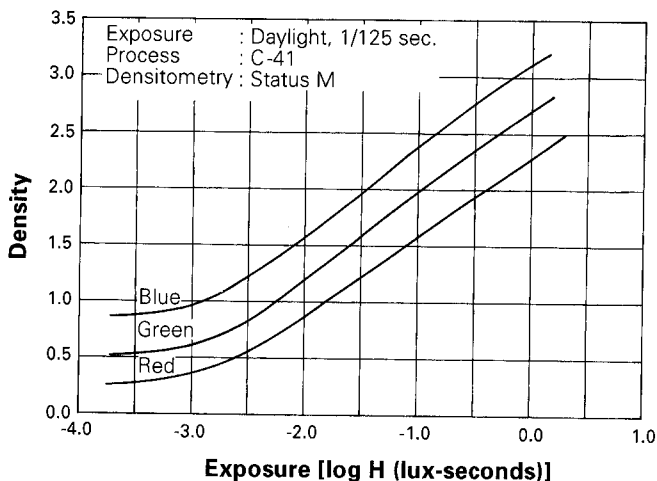
Test Object Contrast 1000:1 **100** lines per mm

16. FILM STRUCTURE

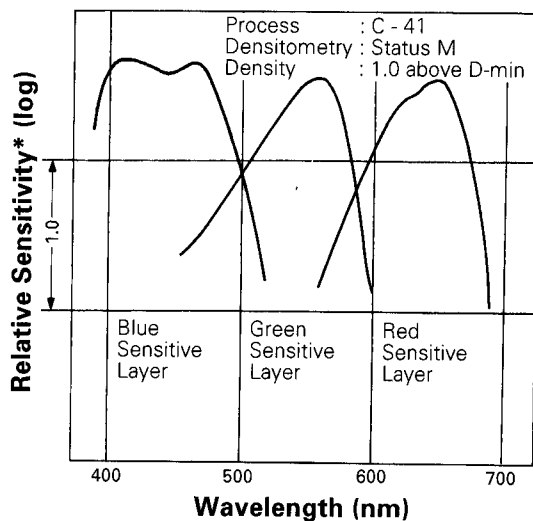


* These layers become colorless and transparent after processing.
** The backing layer is not provided with 135 size film.

17. CHARACTERISTIC CURVES

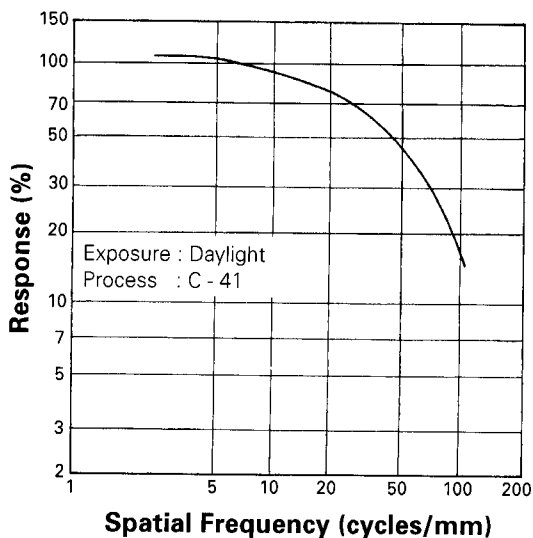


18. SPECTRAL SENSITIVITY CURVES

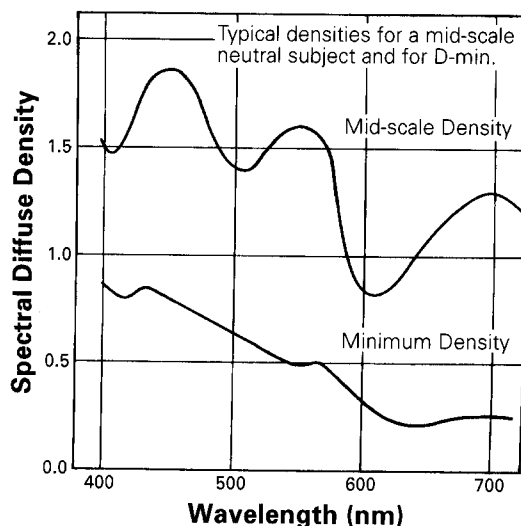


* Sensitivity equals the reciprocal of the exposure (ergs/cm²) required to produce a specified density.

19. MTF CURVE



20. SPECTRAL DYE DENSITY 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.