

**DUPLICATING FILM *HG* FDH/FDH-175****FEATURES**

Duplicating Film *HG* FDH/FDH-175 are daylight graphic arts duplicating films which provide high quality contact reproductions of halftone and line negatives and positives.

1. These films can be handled under daylight conditions (non-ultraviolet or ultraviolet-filtered light). This leads to less film waste.
2. The film backing layer has incorporated a newly developed electroconductive grain to provide permanent protection from charging.
3. Speed and wide exposure latitude are ideal for use with daylight contact printers utilizing either ultra-high pressure mercury vapor or metal halide light sources. Results in faster and more consistent printer work for better efficiency.
4. Excellent gradation reproduction results in accurate reproduction of the entire highlight to shadow range for halftone positives and negatives. In particular, minimized changes in the midtone region ensure accurate duplication.
5. High contrast yields sharp, high quality images. High quality emulsion-to-base exposures also possible.
6. Processed films retain high dimensional stability.
7. Adapted for the HR system which means that up to a 50% decrease in the replenishment amount is possible.

**APPLICATIONS**

- Critical reproduction work of line and halftone films.
- Hardening of soft dots.
- Changing the gradation of halftones.
- Raising the contrast of low-contrast line negatives.
- Spread and choke letter work.
- Printed circuit and integrated circuit patterns, high-precision industrial drawings.

**BASE**

*HG* FDH: 0.100 mm polyester base  
*HG* FDH-175 : 0.175 mm polyester base

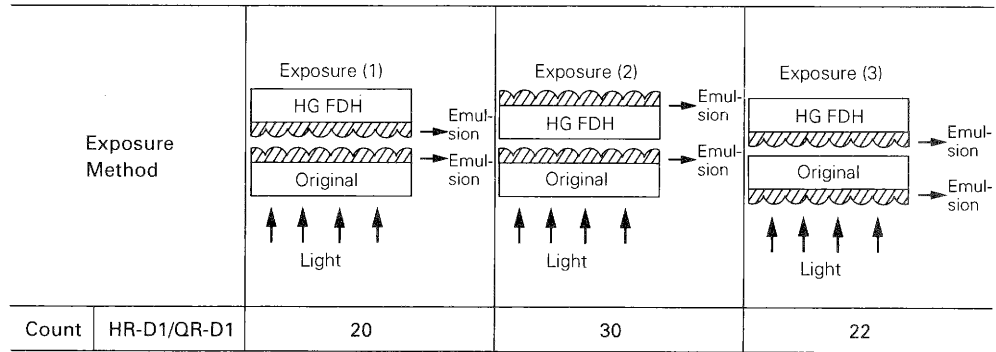
**LIGHT SOURCE**

Ultra-high pressure mercury vapor lamp, metal halide, pulsed xenon lamps.

**SPECTRAL SENSITIVITY**

Short wave ultra-violet (330 ~ 450 nm).

**EXPOSURE EXAMPLE**



Printer: Daylight printer with ultra-high pressure mercury vapor lamp at 1.5kW.

Note: The appropriate exposure count varies according to factors such as processing conditions and printer type. Carry out test exposures to determine the correct exposure count.

**ROOM LIGHT TOLERANCES**

Light Source	Safe Handling Limits
Non-ultraviolet White Fluorescent Lamp	About 30 min. at 200 lux
Yellow Fluorescent Lamp	About 60 min. at 200 lux

Because these duplicating films are high speed films, their safe handling limits are shorter than for daylight contact films. We recommend not raising room illumination more than necessary.

Normal fluorescent lamps with ultraviolet light filters have the same safe handling limits as non-ultraviolet fluorescent lamps.

**AUTOMATIC PROCESSING**

**Example: Automatic Processor FG680AEII**

Step	Chemicals	Temperature	Time
Development	Fuji HQ System Developer QR-D1 QR-D1PD	35°C (95°F)	30 sec.
Fixing	Fuji HQ System Fixer UR-F1 UR-F1PD UR-F1PD H GR-F1	35°C (95°F)	28 sec.
Wash	Running water	15°C (77°F)	27 sec.
Dry	—	Max. 55°C (112°F)	36 sec.

\* HR-D1 can also be used as the developer.

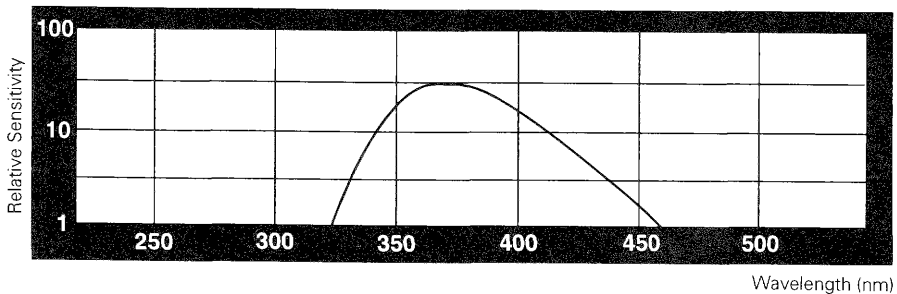
Dilution Ratios:

- Developer                      QR-D1 : water = 1 : 3
- \* HR-D1 : water = 1 : 2
- Developer replenisher      QR-D1 : water = 1 : 2
- Fixer and fixer replenisher   UR-F1 : water = 1 : 2

Standard developer and fixer replenisher rates per sheet of 50% blackened 50.8 x 61.0 cm (20 x 24 in.) are as follows. These amounts may depend on various conditions.

- Developer replenisher      QR-D1 ..... 100 ml
- Fixer replenisher            UR-F1 ..... 120 ml

**SPECTRAL SENSITIVITY**



**CHARACTERISTIC CURVE**

