



### Choosing a Darkroom Safelight Filter:

The question of filter choice for safelights is common. Filters are designed to block the offensive light to your preprocess film or material. Which filter will work correctly is often not known when the fixtures are ordered. The film manufacturer will state in their literature what filter and lamp wattage is required. If it is not known during building construction the fixture must be ordered with the filter to be determined later. The building owner can inform us of their choice and receive the filter at that time. Do not just choose any filter. The correct filter matters.

The recommended filter and lamp is often considered not suitable because the darkroom is, in their estimations, too dark. What often happens next is higher wattage lamps are mistakenly installed to improve visibility, causing damage to the film and the filter. The user did not understand the purposes of a safelight. Please keep in mind that filters have a useable life and will "wear out". Continued use beyond the useable life will damage film. *A frequently asked question is: Why is my new darkroom darker than my old one? The answer is likely old worn filters and improper lamp wattage.*

The purpose of a safelight is to provide a very small amount of special light for a short duration in order to transfer the film into the equipment where it can be processed in total darkness. Some films are too sensitive to endure any light and must be handled in total darkness at all times until processed, making safelights unusable. Others may be exposed to short durations of low intensity limited spectrum light without damage. The needed visibility to perform functions in a darkroom is provided by the recommended safelight during film handling and by another source during printing. The fixture may hold multiple sources but the recommended filter is to be the only source exposed to the unprocessed film.

In practice, the darkroom safelight is energized and the occupant is expected to wait a period of time, as much as twenty minutes, until they are able to see enough to perform their functions. If the function cannot be performed after an extended period of time using the correct filter, fixture placement should be evaluated. Lamp wattage in any case is limited to 15 watts for any filter compartment. Larger wattages will damage the filter and over-expose the film. Under recommended conditions, the only variable left is fixture placement. Some have opted to perform testing using other filters that provide more visibility to see if it will damage their film. This practice is risky yet may provide some improved visibility.

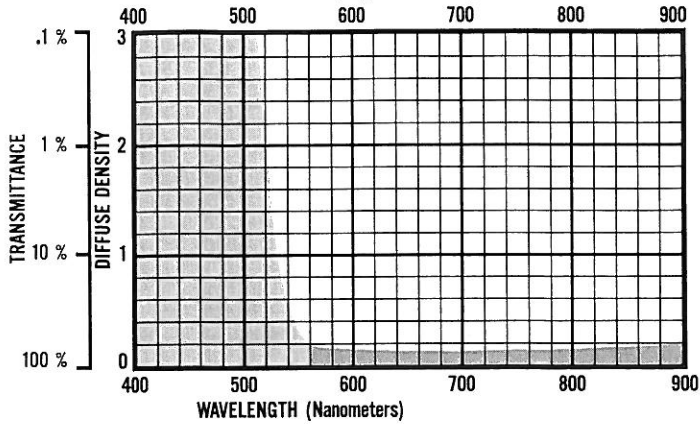
Tim Stevens  
Managing Engineer

## KODAK SAFELIGHT FILTERS

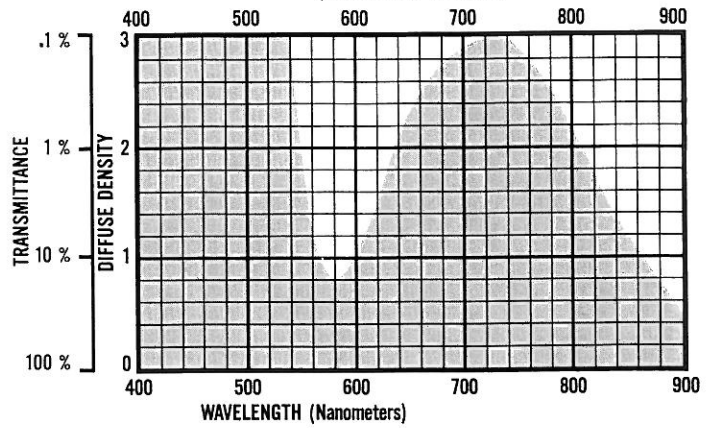
KODAK FILTER	COLOR	USE
<b>NOTE:</b> Refer to the carton or the instruction sheet for complete safelight recommendations.		
OA	Greenish yellow	Black-and-white contact and duplicating materials, projection films
OC	Light amber	Contact and enlarging papers
OO	Light yellow	Flashing halftones made through a KODAK Contact Screen for contrast control
No. 1	Red	Blue-sensitive materials and most phototypesetting materials
No. 1A	Light red	Slow orthochromatic materials
No. 2	Dark red	Fast orthochromatic materials, green-sensitive x-ray films
No. 3	Dark green	Some panchromatic materials
No. 6B	Brown	Blue-sensitive x-ray films
No. 7	Green	Some black-and-white infrared materials
No. 8	Dark yellow	Color print and color intermediate motion-picture films
No. 10	Dark amber	Color negative papers, color slide and print materials, panchromatic black-and-white papers
No. 11	Appears opaque, transmits infrared radiation	For use with infrared inspection devices
No. 13	Amber	Color negative papers, panchromatic black-and-white papers
Type ML-2	Light orange	Intraoral dental x-ray films
Type GBX-2	—	Most blue-sensitive x-ray films, most green-sensitive medical x-ray films

# SPECTROPHOTOMETRIC CURVES

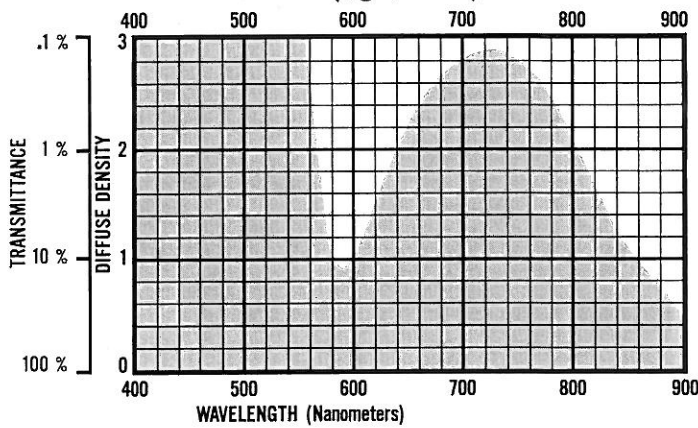
**KODAK Safelight Filter OO  
(Light Yellow)**



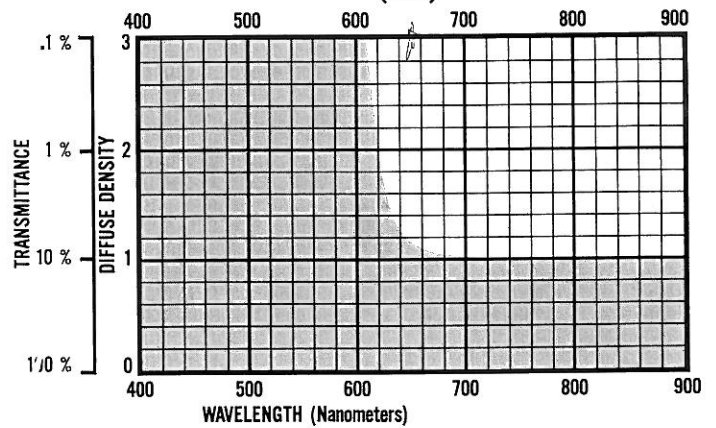
**KODAK Safelight Filter OA  
(Greenish Yellow)**



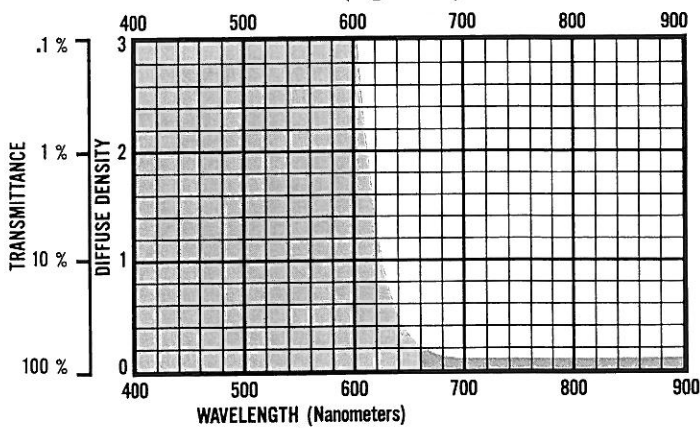
**KODAK Safelight Filter OC  
(Light Amber)**



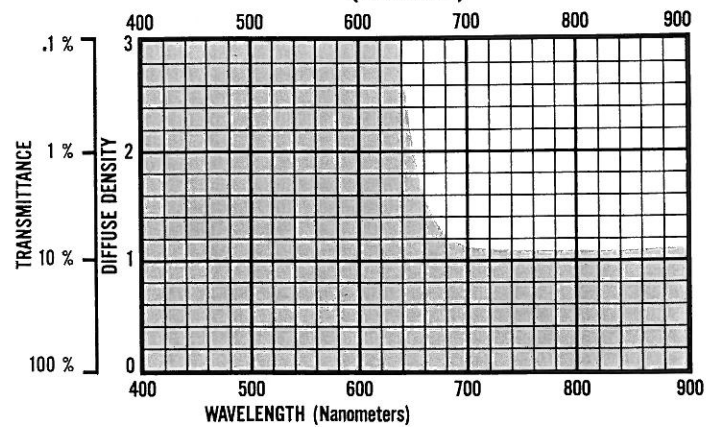
**KODAK Safelight Filter No. 1  
(Red)**



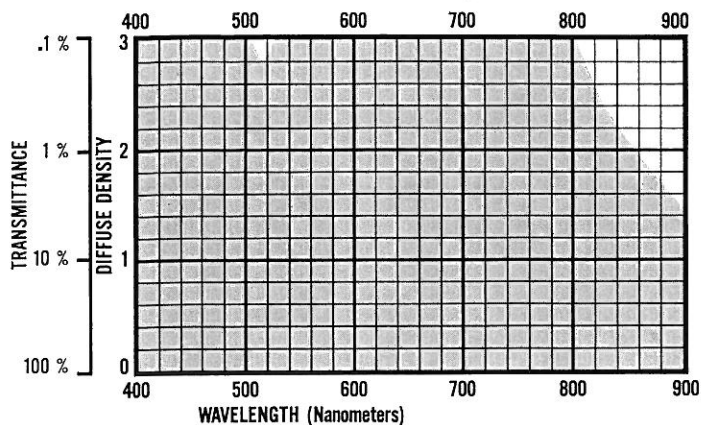
**KODAK Safelight Filter No. 1A  
(Light Red)**



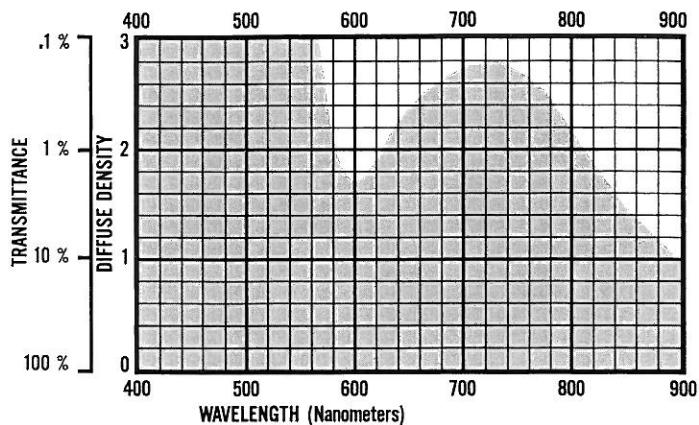
**KODAK Safelight Filter No. 2  
(Dark Red)**



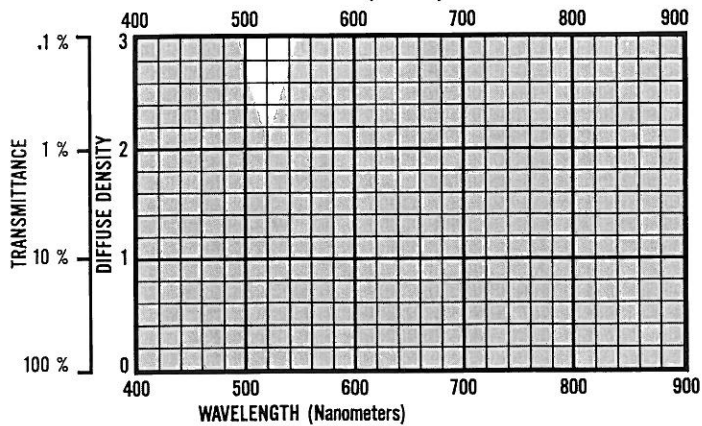
**KODAK Safelight Filter No. 3  
(Dark Green)**



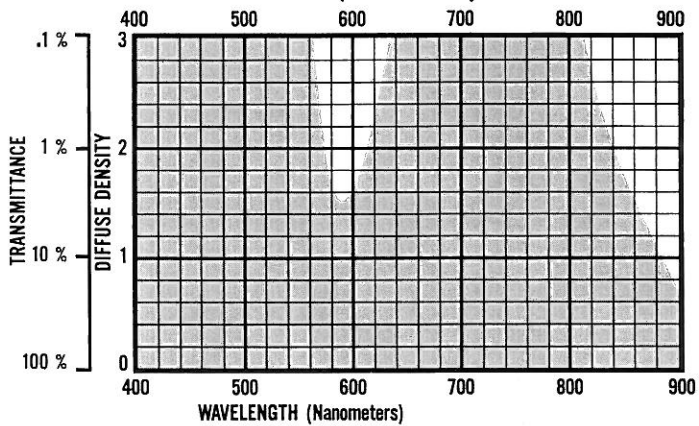
**KODAK Safelight Filter No. 6B  
(Brown)**



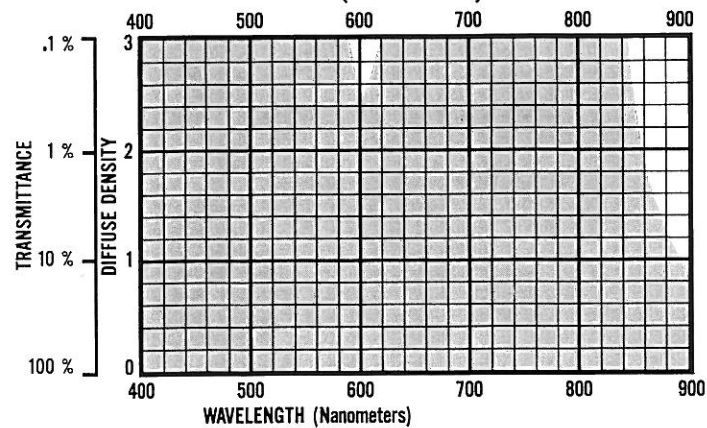
**KODAK Safelight Filter No. 7  
(Green)**



**KODAK Safelight Filter No. 8  
(Dark Yellow)**



**KODAK Safelight Filter No. 10  
(Dark Amber)**



**KODAK Safelight Filter No. 11  
(Infrared)**

