

METOLIGHT® UV-Filter

METOLIGHT UV-Filter foils and UV-filter sleeves are used to filter out UV-radiation from daylight and fluorescent lamps to provide a UV-safe illumination.

UV radiation from the sun or electric lights can damage light sensitive compounds present in many products. In order to avoid material fading and deterioration, it is very important to filter out the ultraviolet light from all light sources in the work environment. ASMETEC offers a complete range of UV filter sleeves and UV-filter foils from visual clear to amber coloured, UV filtering capabilities from 400 nm up to 625nm.

Damaging, stray UV is a significant problem in work places such as UV-curing areas (coating of printed circuit boards, UV-curing resins) but also museums, libraries, archives, labs or hospitals but also in offices or stores.

To preserve sensitive and valuable materials, these environments need to control all climate aspects including temperature, humidity, and light exposure. What many facilities don't realize is that simply blocking exterior sunlight isn't enough. Interior lighting can produce as much, if not more, UV damage. Overhead fluorescent lamps emit significant levels of UV and can have damaging effects on light sensitive materials.

METOLIGHT® SF Filter foils

METOLIGHT UV- Filterfoils SFC-10/SFC-20, SFLY5, SFG-10 are clear or light yellow or yellow-gold coloured PET-foils to cover windows or fluorescent lamps in working areas of photo-sensitive materials.

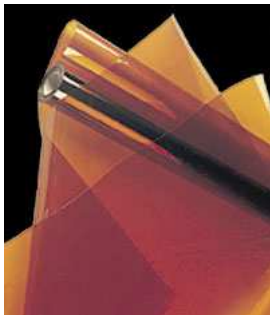
They safely block UV radiation, depending on colour filter from 400 nm up to 520 nm. The foils in thickness of 0,1 mm are available as rolls in width of 122 cm, 10 m length or as sheet cut to size. They are fixed to windows between the panes or with a special UV-resistant glue film METOLIGHT SKF-19. The UV-blocking coating both sides is not solvent resistant!

We offer these filter foils:

METOLIGHT SFC-10/SFC-20, clear, UV-blocking 400 nm, recommended wherever lamp colour temperature shall retain, e.g in museums, libraries, archives, medical care etc.

METOLIGHT SFLY-5, light yellow, blocking below 470 nm, visually bright light, suitable for many UV curing resists and inks

METOLIGHT SFG-10, yellow-gold, blocking below 520 nm, suitable for diazo films and high sensitive resists, inks, resins.



METOLIGHT SFG 10



METOLIGHT SFC-20



METOLIGHT ASR-G-10



METOLIGHT ASR C-20

METOLIGHT® ASR UV-Filter sleeves

METOLIGHT-ASR UV-filter sleeves are made of polycarbonate with a coloured, UV-absorbing inlet. They are available in diameters suitable for T5 / T 8 and T 12 fluorescent tubes in all common lengths. The sleeves can be used to replace expensive lamps with built in UV-filters. Just use cheap regular fluorescent lamps and the UV-Filter sleeves to have a UV-save illumination.

The filter sleeves provide a maximum of illumination combined with immediate protection of the lamp. In event of breakage METOLIGHT ASR will contain the dangerous glass fragments, thereby protecting both personnel and expensive equipment.

The new UV-400 filter sleeve blocks UV-radiation below 400 nm. It fits the fluorescent lamps T5 and T8 just like a skin, no end caps for centering is needed. The main advantage is that the protected tubes still fit to all common lamp fittings with louvers or diffusers since the outer diameter increases for only 1,5 mm. The UV-400 sleeves are ideal for the usage in museums, libraries, shops, stores, sales desks etc.

For darkroom areas we offer filter sleeves developed in cooperation with AGFA and KODAK, absorbing light below 625 nm.

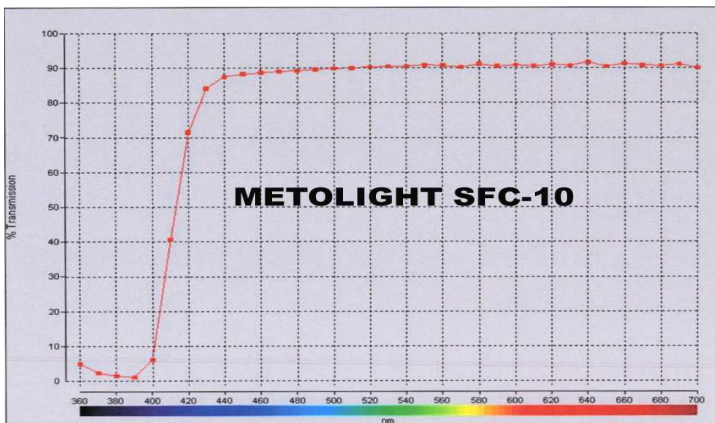
METOLIGHT ASR-R10, absorbing below 625 nm can be used in these truly dark areas.. Stray light can be the cause of persistent fogging and can be traced to the afterglow of a white fluorescent lamp or instrument panel lights, reflected by operator's shirt. As many dark rooms are not truly dark, we recommend a simple DEAD TEST

A single 4 / 5' sleeve will provide more safelight brightness than 3 regular lamps. 1 standard fluorescent lamp with METOLIGHT ASR-R-10, 4 ft is ideal for up to 50 sq.ft (5 sqm) and pro-rata thereafter



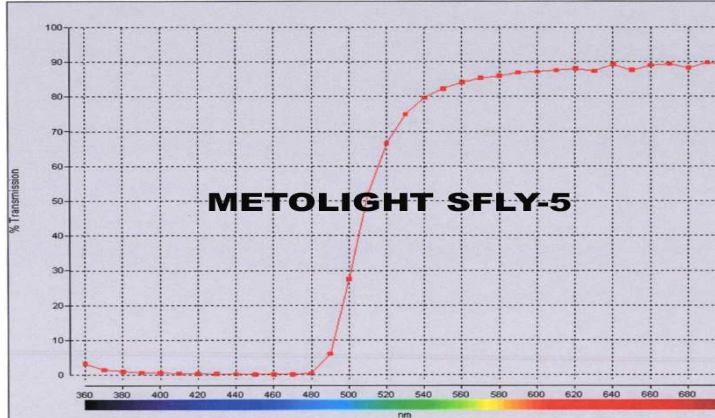
METOLIGHT ASR-R-10

Filter curves of METOLIGHT® UV-Foils and UV-Filter sleeves



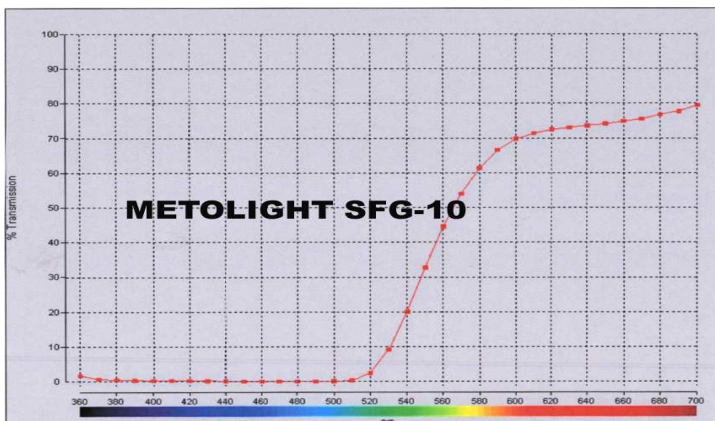
The glass clear UV-Filter foil SFC-10 or the corresponding filter sleeves ASR-C10 and UV-400 block UV radiation below 400 nm. The human eye does not recognize a change of colours. So these filters are ideal to be used in museums, galleries, archives, libraries, stores,, medical care, offices, working halls etc.

The filter sleeve UV-400 moreover offers the advantage to suit to all lamp fitments with louvers or diffusers since the outer diameter of the original lamp increases for less than 1,5 mm



The filter foils SFLY-5 or the corresponding filter sleeves ASR-LY5 offer a bright light yellow illumination to the human eye. They block UV-radiation below 470 nm.

They are recommended in industrial use while working with UV-curing inks, resins, films etc. Compared to UV-filter SFG-10 they offer a brighter illumination. However we recommend to run a test to verify. In some cases UV-curing materials do have a 2nd or 3rd peak above the main peak to cure.



The filter foil SFG-10 or the corresponding filter sleeves ASR-G10 block UV-radiation below 520 nm and offer absolute UV-safe illumination for all UV-curing materials.

They are used in industrial areas with high UV-sensitive components.

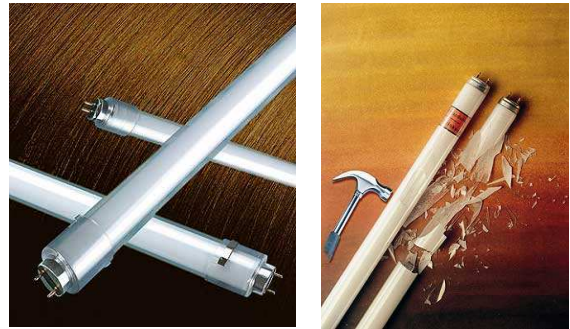
Compared to foil / sleeve LY-5 the visual brightness to the human eye is less but the UV-blocking range is safest available.

Protection Sleeves METOLIGHT® ASR-PR

METOLIGHT ASR-PR protection sleeves are made of clear polycarbonate. They slip easily over the lamp and in the event of breakage contain the shattered glass fragments and phosphors.

The robust, clear polycarbonate sleeve stands high and low temperatures (-90°C to 125 °C), is fire proof up to 500 °C, non toxic, provides unchanged bright light. The sleeve stands many organic and anorganic acids and alkalines but is sensitive against ammonia and ammonia solvents.

Protection sleeves are recommended to be used in all working areas with risk of lamp breakage by occasional touch.



Dimensions of METOLIGHT®-UV-Filter Sleeves

Sleeve Type Lamp power	T5 – 16 mm	T8 – 26 mm	T12 – 36 mm	Outer diameter
	Length	Length	Length	
6 Watt	230 mm			17,5 or 20 mm
8 Watt	300 mm			17,5 or 20 mm
13 Watt	525 mm			17,5 or 20 mm
14 Watt	549 mm			17,5 or 20 mm
15 Watt		450 mm		27,5 or 33 mm
18 Watt		600 mm		27,5 or 33 mm
20 Watt			600 mm	42 mm
21 Watt	849 mm			17,5 or 20 mm
28 Watt	1149 mm			17,5 or 20 mm
30 Watt		900 mm		42 mm
35 Watt	1149 mm			17,5 or 20 mm
36 Watt		1200 mm		27,5 or 33 mm
40 Watt			1200 mm	42 mm
58 Watt		1500 mm		27,5 or 33 mm
65 Watt			1500 mm	
70 Watt		1800 mm		27,5 or 33 mm
75 Watt			1800 mm	42 mm
100 Watt			2400 mm	42 mm

General Notes:

METOLIGHT UV-Filter Sleeves fit to all common T5 / T8 / T12 fluorescent lamps
The sleeves are made of Polycarbonate, Endcaps made of Tririx 3020U
The sleeves can be used in a temperature range of – 90°C bis + 120°C

Not suitable for water tight enclosed fittings or use with HO-lamps.

Standards: RTI 125, UL94, Glühdrahttest 850°C, IEC695-2-1, BSS45 4 1989, CE, WEE and ROHS

Defective fluorescent lamps with conventional choke coils and starters must be replaced because temperatures may rise above 250°C and damage the sleeves and end caps.

Electronic starter devices do increase life time of your fluorescent lamps

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