

# TECHNICAL DATA SHEET

## TECHNISCHES DATENBLATT

### UV-Protection Yellow Foil

Y520

#### GENERAL INFORMATION

The UV-protective film Yellow Foil Y520 was specially developed for UV photo-sensitive applications and blocks radiation below 520 nm wavelength. The UV protective film Y520 consists of yellow-dyed cellulose triacetate. The Y520 UV blocking filter is widely used in the photolithography, the PCB and microelectronics manufacturing, printing plates and photoresist. Even in the pharmaceutical research, development and production our films are in use.

#### FEATURES

- Blocks reliable light wavelengths below 520 nm (see diagram on the next page)
- High heat resistance
- Outstanding optical purity
- High tensile strength
- Long-term UV-stable
- High inherent scratch resistance
- Also available as self-adhesive foil

#### TECHNICAL DATA

Thickness:	117 µm
Width:	1,15 m
Density:	152,1 g/m <sup>2</sup>
Tensile strength:	> 120 MPa
Melting range:	235 °C bis 270 °C

#### CHEMICAL CHARACTERISTICS

The Yellow Y520 film is waterproof and resistant to oils, greases, fuels and aliphatic hydrocarbons. The Yellow film is dissolved or swollen by chlorinated hydrocarbons, ketones, aromatic solvents. This may affect the optical properties. The UV protective film is not resistant to concentrated acids and alkalis. In these compounds, the foil is attacked.

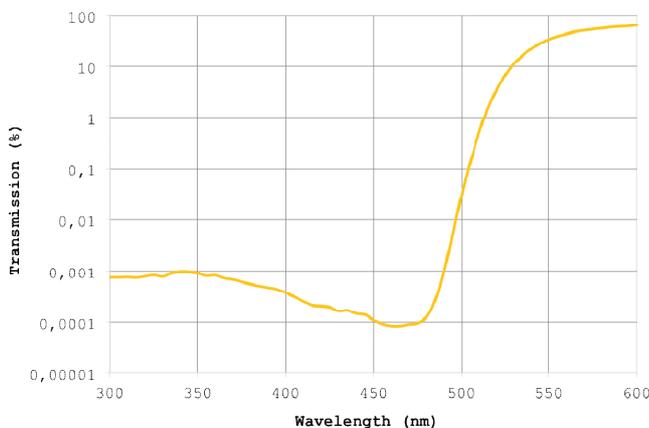
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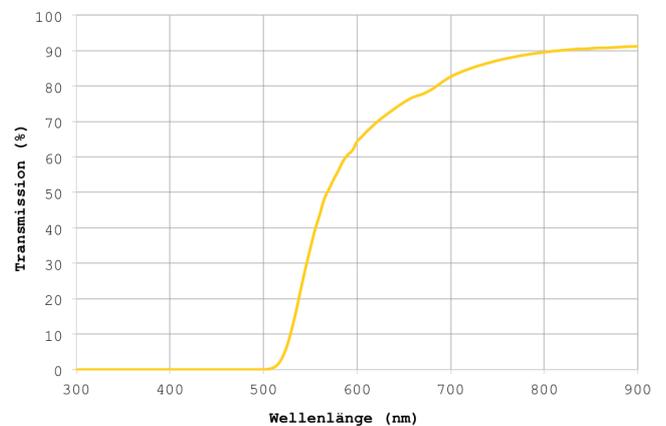
### OPTICAL TRANSMISSION

The optical transmission properties of the UV-protection foil Yellow Y520 were specially designed for the high quality standards in the field of yellow rooms (photolithography in microelectronics manufacturing). The graph shown below is semi-logarithmic. At 450 nm wavelength, the transmission is approximately 0.0001%, thus dropped to a fraction of one millionth of the incident light. If you compare our foil with other foils, be sure to ask for a semi-logarithmic plot of the transmission since these differences cannot be seen in a linear plot.

Semi-logarithmic transmission graph



lineare transmission graph



This transmission spectrum is not to be seen as specification, but as exemplaric measurement of a certain lot of our yellow foil.

### FIRE BEHAVIOR

The UV-protective film Yellow Y520 is self-extinguishing.

### WATER ABSORPTION

Since the UV-protective yellow foil Y520 is made from the natural product of cellulose, it shows a certain water absorption ability that can affect the dimensional accuracy. This water uptake was however reduced to a low level. The Y520 has an average water vapor permeability, which allows a rapid drying of the mounting fluid after foil installation.

### STORAGE

Under proper storage conditions of 5 - 25 °C and a relative humidity of 30 - 60%, the UV protection film Y520 has a shelf life of up to one year. To avoid pressure points, we recommend a standing or hanging storage.

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### INSTALLATION

The UV-protective foil Y520 can be processed comparable to paper. You can use UV stable double-sided adhesive tape stuck to windows, privacy screens, room dividers, lamps and front openings. We recommend, however, for large windows applications, to use our self-adhesive UV protection film YSA520. To filter fluorescent tubes we offer special polycarbonate tubes, in which our UV blocking filter is incorporated (yellow light).

### SALES UNITS

Article-number:	Rolls (Width: 1,15 m)
GE15212001	1 m
GE15212005	5 m
GE15212010	10 m
GE15212020	20 m
	1,15 m x ... Pre-cut (running meters)

### Further Information

All data and information relate to the best of our knowledge and are based on measurement and experience. It remains in your responsibility to check the suitability of our yellow foil for the intended use of it. Our products are regularly quality-tested and further developed. We therefore reserve the right to adjust without additional information, the chemical composition or physical characteristics of new knowledge.

For any further information please contact our technical advisory.

Your request by E-Mail or Phone.

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