

Definition of optical glass and optical filter glass

Optical glass is glass used in optical systems in order to influence light with respect to its direction (imaging) or to its spectral transmission (filter effect).

Optical glass for imaging (directional influence on light) is specified (as in the international standard ISO 12123 – Specification of raw optical glass) by

- the index of refraction and its dependence on the wavelength (dispersion)
- the transmission of the visible light or additionally in the near ultraviolet or infrared wavelength range
- the optical homogeneity (constant optical properties throughout the volume)
- the material homogeneity (low content of bubbles, stones, striae and stress birefringence)

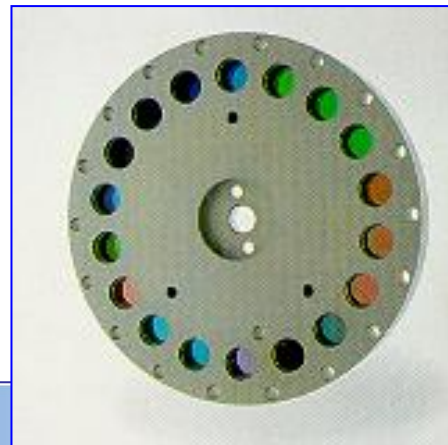
Optical colored glass for filter applications (spectral transmission influence on light) is specified by

- the transmission or blocking of the visible light or additionally in the near ultraviolet or infrared wavelength range for defined wavelength ranges
- the optical homogeneity (constant optical properties throughout the volume)
- the material homogeneity (low content of bubbles, stones, striae and stress birefringence)

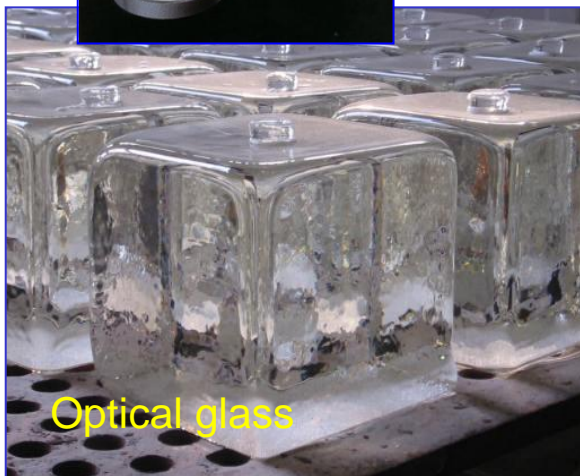
Optical glass includes its variants, which are adjusted to fulfill special functions like radiation resistance or enhanced visible ultraviolet or infrared light transmission.



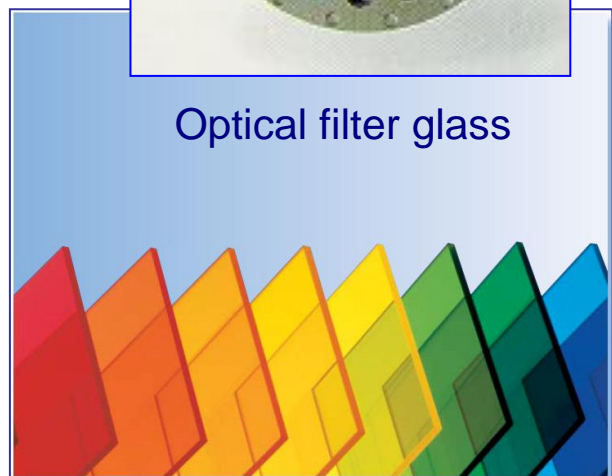
Binocular



Filter wheel
for research



Optical glass



Optical filter glass