

DATA SHEET

SCHOTT D263M



D 263[®] M

Designed for use as
microscopy cover glass

This advanced borosilicate glass is designed for optimum performance as cover glass in microscopy processes in medical, biological and research work, meeting the requirements specified in ISO 8255-1. Its outstanding geometrical properties and high optical performance means it can be relied upon to deliver accurate imaging in light and fluorescence microscopy applications.



Tight geometry
specification and
quality control



Superior luminous
transmittance



High chemical
resistance



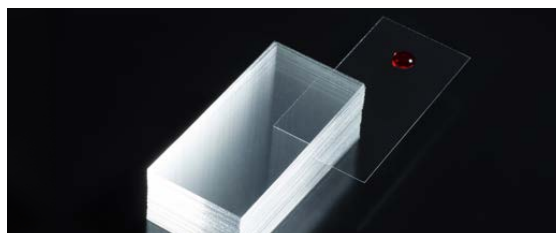
Low auto-
fluorescence



ISO 8255-1
compliant



Fire-polished
surface



D 263[®] M cover glass, produced with the SCHOTT proprietary Down-Draw process, has a chemical composition that ensures valid and reliable research results. This is due to low autofluorescence and high chemical resistance, as well as a refractive index finely tuned to microscopy use. With standard thicknesses from 0.1 mm to 0.21 mm, it's also available from stock in a wide variety of easy-to-cut sheet sizes.

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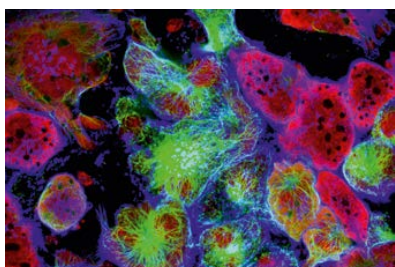
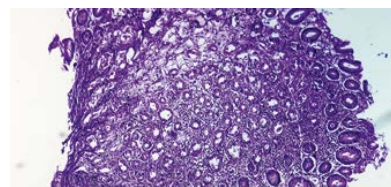
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Pathology

The increasing demand for histopathological and cytopathological diagnostics is a strong driver for the automation of microscopy processes. The stringent quality requirements SCHOTT sets itself for the material D 263[®] M enable a consistent quality of the cover slip, which is particularly suitable for smooth use in highly automated processes.



Super resolution microscopy

The cover slip is an important component in microscopy processes achieving the highest possible optical resolution. For super resolution microscopy SCHOTT has developed the cover glass D 263[®] M 1.5 H, which significantly improves the resolution in microscopy processes due to a reduced thickness tolerance of $\pm 5 \mu\text{m}$.

Fluorescence microscopy

The selection of high purity raw materials for the manufacture of D 263[®] M guarantees an absolutely colorless cover glass with a low autofluorescence.

		Standard thickness*	Standard formats**
No. 0	in mm	0.100 ± 0.015	435 x 410
No. 1	in mm	0.145 ± 0.015	435 x 410
No. 1½	in mm	0.175 ± 0.015	710 x 410
No. 2	in mm	0.210 ± 0.020	
No. 1½ H	in mm	0.170 ± 0.005	435 x 420

* In reference to ISO 8255-1

** Other formats and thicknesses upon request

Optical properties		
Refractive index ¹	n_e	1.5255 ± 0.0015
Abbe value	v_e	55
Edge wavelength	in nm	312
λ_c ($\tau = 0.46$)	(thickness in mm)	(0.145)
Luminous transmittance $\tau_{0.65}$	in %	91.7
	(thickness in mm)	(0.145)

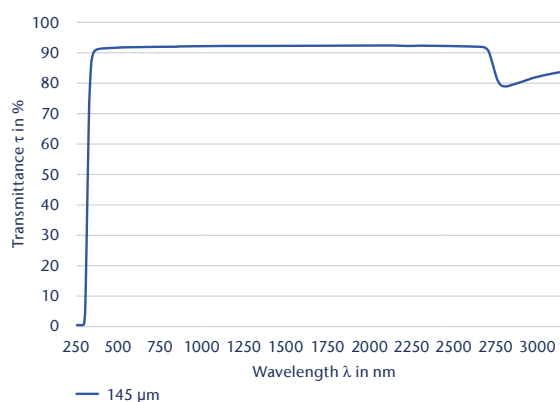
¹ Pretreatment of samples. Condition as supplied ["as drawn"]

Chemical properties		
Hydrolytic resistance (acc. to DIN ISO 719)	Class	HGB 1
Acid resistance (acc. to DIN 12116)	Class	S 3
Alkali resistance (acc. to DIN ISO 695)	Class	A 2

Mechanical properties		
Density ρ	in g/cm ³	2.51
Young's modulus E	in kN/mm ²	72.9

Thermal properties		
CTE (coefficient of thermal expansion) α	in $10^{-6} \cdot \text{K}^{-1}$ (20 °C; 300 °C)	7.2
Transformation temperature T_g	in °C	557

Transmission



carbon neutral
print production

MIX
Product group
responsible for
FSC® C006855

ENGLISH 11/2022 kn/nino Printed in Germany