

### Coverglass D 263 M for flawless microscopy

D 263 M cover glass is a colorless borosilicate glass with a very low iron content. Its composition assures excellent resistance to chemical attack. D 263 M meets the requirements laid down in ISO 8255-1.

The outstanding features of D 263 M include:



- Virtually colorless appearance
- Excellent internal glass quality with very low levels of inclusions, striae, bubbles, streaks, etc.
- High spectral transmission
- Exceptional cutting and grinding characteristics
- Excellent flatness
- Optimum resistance to chemical attack
- Refractive index finely adapted to microscopes

D 263 M is used as coverglass in microscopy for medical, biological and research work.

Spectral transmittance (d=0.15 mm)



Between 0.15 and 0.40 mm glass thicknesses, the light transmittance is  $\tau_{VA} = 91.8\%$ . In the visible range of the spectrum D 263 M is without absorption. The excellent UV absorption properties makes D 263 M an ideal material for use in fluorescence microscopy.

#### Optical properties:

Refractive indices (directive values)  
 $n_e (\lambda = 546.1 \text{ nm}): 1.5255 \pm 0.0015$   
 $n_D (\lambda = 589.3 \text{ nm}): 1.5230$   
 Abbe value  $v_e : 55$

#### Chemical properties:

Hydrolytic class: HGB 1  
 (DIN-ISO 719)

#### Dimensions:

| Thickness in mm <sup>1)</sup> , mils |                       |                       | Sizes in mm, inches                |                                   |                             | Flatness in mm <sup>2)</sup> , inches |
|--------------------------------------|-----------------------|-----------------------|------------------------------------|-----------------------------------|-----------------------------|---------------------------------------|
| Nr.                                  | Minimum               | Maximum               | Gross width (untrimmed with beads) | Net width (trimmed without beads) | Length                      |                                       |
| 0                                    | 0.085 mm<br>3.35 mils | 0.115 mm<br>4.53 mils | 410±20 mm<br>16.14±0.79 in.        | 360-15 mm<br>14.17-0.59 in.       | 435±10 mm<br>17.13±0.39 in. | typically < 5.0 mm<br><0.20 in.       |
| 1                                    | 0.13 mm<br>5.12 mils  | 0.16 mm<br>6.30 mils  | 410±20 mm<br>16.14±0.79 in.        | 380-15 mm<br>14.96-0.59 in.       | 435±10 mm<br>17.13±0.39 in. | typically < 5.0 mm<br><0.20 in.       |
| 1.5                                  | 0.16 mm<br>6.30 mils  | 0.19 mm<br>7.48 mils  | 410±20 mm<br>16.14±0.79 in.        | 380-15 mm<br>14.96-0.59 in.       | 435±10 mm<br>17.13±0.39 in. | typically < 5.0 mm<br><0.20 in.       |
| 2                                    | 0.19 mm<br>7.48 mils  | 0.23 mm<br>9.06 mils  | 410±20 mm<br>16.14±0.79 in.        | 380-15 mm<br>14.96-0.59 in.       | 435±10 mm<br>17.13±0.39 in. | typically < 5.0 mm<br><0.20 in.       |

Other thicknesses are available upon request.  
 All data are subject to change.

<sup>1)</sup>The accuracy of measurement for the thickness is  $\pm 5 \mu\text{m}$

<sup>2)</sup>For trimmed glass (without the bead), flatness is measured net width x length. The maximum deviation of the height at any point on the total surface of the glass panel is measured from an ideal plane surface. The determined maximum value is the index for the flatness deviation. It does not, however, include the nominal thickness of the glass panel.