

# Corning 0211 Microsheet

## Product Information



**CORNING**  
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Technical  
Materials

### PI0211

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Corning 0211 is a thin, lightweight, flexible glass featuring excellent optical performance that makes it a material of choice for microdisplay components and specialty substrates.

### Product Description

Corning 0211 micro-sheet is a borosilicate glass available 0.05 mm to 0.5 mm thick. It is manufactured using a draw process that produces a final product with a high quality, flat surface, low roughness and excellent optical properties.

The glass can be finished to very high quality levels. Finishing, coating and inspection capability provides glass that is ready to use without further processing.

This glass can also be tempered to provide a high strength, thin glass, making it a good component in environments where a strong, rugged glass is needed.

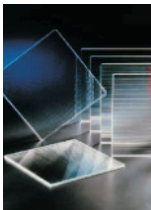
Corning 0211 can also be doped with various elements to shift the optical properties to a desired range according to customer requirements.

### Applications

- Display component substrate
- Touch panel display covers
- Filters
- Cover glass

### Key Benefits

- Thin
- Flexible
- Excellent surface quality- easy to coat
- Can be doped to shift optical properties
- Temperable to increase strength



Corning  
Microsheet

### Standard Product Configuration(s):

- Sheet
  - Length 14" - 16" 356 mm - 406 mm
  - Width 15" - 17" 381 mm - 432 mm
  - Thickness 0.002" - 0.020" 0.05 mm - 0.5 mm
- Cut parts
  - 1" x 1" (25 mm x 25 mm) up to full sheet size
- Non-contact packaging available upon request
- **Special sizes available on request**

Product Specifications		
Mechanical	Metric	English
Density	2.53g/cm <sup>3</sup>	157.9 lb/ft <sup>3</sup>
Young's Modulus	7.59 x 10 <sup>3</sup> kg/mm <sup>2</sup>	10.8 x 10 <sup>6</sup> psi
Poisson's Ratio	0.22	
Shear Modulus	3.09 x 10 <sup>3</sup> kg/mm <sup>2</sup>	4.4 x 10 <sup>6</sup> psi
Knoop Hardness (KHN <sub>1</sub> )	458	
Viscosity		
Working Pt. (1 o- poises)	1008°C	1846°F
Softening Pt. (10 <sup>7.6</sup> poises)	720°C	1328°F
Annealing Pt. (1013 poises)	550°C	1022°F
Strain Pt. (1014 poises)	508°C	946°F
Thermal		
Coefficient of Expansion (0-300°C)	73.8 x 10 <sup>-7</sup> /°C	41.0 x 10 <sup>-7</sup> /°F
(25°C to Set Point 513°C)	84.0 x 10 <sup>-7</sup> /°C	46.7 x 10 <sup>-7</sup> /°F
Thermal Conductivity, 0°C	$\frac{\text{cal cm}}{\text{sec cm}^2 \text{ }^\circ\text{C}}$	$\frac{\text{Btu ft}}{\text{h ft}^2 \text{ }^\circ\text{F}}$
	.0023	.54
Optical		
Refractive Index (589.3nm)	1.523	
Transmission @ 420 nm	92%*	
2200 nm	92%*	
<i>*Through a sample thickness of 1.0 mm</i>		
Electrical		
Log <sub>10</sub> Volume Resistivity @ 250°C	8.3 ohm-cm	
@ 350°C	6.7 ohm-cm	
Dielectric Constant @ 20°C; 1 MHz	6.7	
Loss Tangent @ 20°C; 1 MHz	.46%	



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