



# 0.9 mm Glass Number 50 Capillary - 25/pk

- X-ray data collection
- Liquid-liquid diffusion crystallization
- Gel acupuncture crystallization

## Product codes:

Reference: HR 6120

## Product gallery:



## Product description:

- Thin walled - 10 micron
- Glass Number 50 (Glass 0500, borosilicate)

Glass Number 50 (Glass 0500, borosilicate glass) capillaries that are extremely thin walled (approximately 10 micron wall thickness). The length of the capillary has a well defined diameter, with one end having a funnel shape and the other end closed. Glass capillaries have a wall thickness of 0.01 mm and an overall length of 80 mm +/- 5 mm. Glass capillaries are available in a wide range of outside diameters from 0.1 mm to 2.0 mm. They are designed to mount, hold, and store small molecule and biological macromolecular crystals for x-ray data collection. Capillaries can also be used for crystal density measurements and crystal growth experiments. The capillaries can be sealed tightly against moisture and gases using wax, epoxy, or other sealing materials.

In determining what glass or quartz capillary is right for you, please refer to the "Linear Absorption Coefficient  $\mu$  cm<sup>-1</sup>" table. This table indicates the amount of radiation that is absorbed by the capillary during x-ray data collection.

For 0.1 mm to 2.0 mm capillaries the open end capillary tube base size is 3.0 +/- 0.15 mm OD x



0.13 +/- 0.10 mm Wall thickness.

The Diameter is measured about 30 to 40 mm from the closed end (measuring instrument: LaserMicrometer LS 7500) The tolerances are as follows.

Diameter Tolerance Minimum Diameter Maximum Diameter

0.1 mm +/-0.05 mm	0.05 mm	0.15 mm
0.2 mm +/-0.05 mm	0.15 mm	0.25 mm
0.3 mm +/-0.05 mm	0.25 mm	0.35 mm
0.4 mm +/-0.05 mm	0.35 mm	0.45 mm
0.5 mm +/-0.05 mm	0.45 mm	0.55 mm
0.6 mm +/-0.05 mm	0.55 mm	0.65 mm
0.7 mm +/-0.05 mm	0.65 mm	0.75 mm
0.8 mm +/-0.05 mm	0.75 mm	0.85 mm
0.9 mm +/-0.05 mm	0.85 mm	0.95 mm
1.0 mm -0.05 +0.25 mm	0.95 mm	1.25 mm
1.5 mm +/-0.25 mm	1.25 mm	1.75 mm
2.0 mm +/-0.25 mm	1.75 mm	2.25 mm

#### Borosilicate Specifications

Glass type Borosilicate glass 3.3

Density 2.23 g/cm<sup>3</sup>

Poisson's number 0.20

Transformation temperature T<sub>g</sub>= 525 degrees Celsius

Annealing point approximately 560 degrees Celsius

Softening point approximately 825 degrees Celsius

Working point 1260 degrees Celsius

Refractive index 1.473 at 20 degrees Celsius; 587.6 nm

Hydrolytic resistance, class 1 (DIN ISO 719)

Acid resistance, class 1 (DIN 12 116)

Alkalai resistance, class 2 (DIN ISO 695)

Chemical composition SiO<sub>2</sub> 81.0%

Na<sub>2</sub>O 3.5%

Al<sub>2</sub>O<sub>3</sub> 2.0%

K<sub>2</sub>O 0.5%

B<sub>2</sub>O<sub>3</sub> 13.0%

Capillaries have only been tested at atmospheric pressure (760 mmHg (torr), 29.92 inHg, 14.696 psi). Use at other pressures has not been tested.

Per maggiori informazioni visita il sito <https://hamptonresearch.com/>

#### Product features:

CRF - TIPO: Glass Number 50 Capillaries