Nupore Membrane For Lateral Flow Test

Nupore produces highly consistent and optimized Nitrocellulose (NC) Membranes for lateral flow tests. A wide variety of membranes are available in roll form as standard products to meet various needs.

Membranes are directly cast on transparent polyester backing to improve the handling strength. Standard polyester film is 100 μm thick, although other thickness can be available on order.

Technical Data

Wicking Rate :

The wicking rate is an important characteristic of NC membrane for lateral flow tests and primarily determines the reaction kinetics. **Nupore** membranes are designated by pore size / wicking rate and have reproducible and defined wicking rates.The wicking rate of blocked membranes will, however, depend on the blocking protocol.

Wicking Rate time is expressed as Sec. / 4cm that is time taken to travel solution upto 4 cm. This parameter is specific as mean with minimum and maximum acceptable value for individual point. To perform test Humidity and Temperature must be controlled in testing room.

Thickness

Membrane thickness effects the width of Test and Control Line. Thickness is given in Microns. This is specification and average acceptable values for individual points. The thickness of polyester backing is not included in the thickness of Membrane.

Membrane Type	Rating	Membrane Thickness(μm)	4 cm Wicking Time (sec)
LFNC-C	160	110	160 (± 20)
	140	110	140 (± 10)
	10 μm	110	110 (± 15)
	12 μm	110	95 (± 15)
	15 μm	110	90 (± 15)
	70	110	85 (± 15)
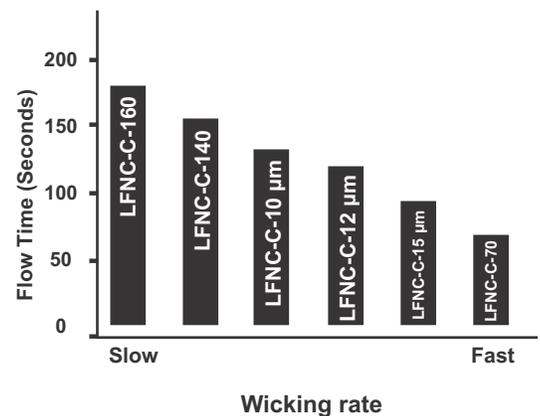
Storage

Nupore recommends storage of membrane rolls at 15ºC to 20ºC for longer shelf life. The membrane rolls should be kept away from heat radiators. The membrane is inflammable when subjected to direct heat.

How to select

Selection of membrane depends on the assay. Highest sensitivity is obtained with smaller pore size (slower wicking rate). For high affinity Ag/Ab reaction, use of bigger pore size (faster wicking rates) can result in faster test with adequate sensitivity.