

Permeability Cups

The permeability of a coating to water vapor is measured by suspending a free film of the material across the top of a wide shallow cup. Then, in a controlled environment, a desiccant is used to draw water vapor through the film into or out of the cup. Weight loss or gain of the cup's content over a specified period is used to determine the rate of vapor transmission through the film. The permeability of a film to many other substrates in the gaseous state can be tested in a similar fashion.

Permeability Cup

The BYK-Gardner PERM Cup is a shallow cylinder with a threaded flange, flat retaining washer and threaded ring cover. Rubber gaskets are used to tightly seal the specimen between the cup and the ring cover. The cup and cover are knurled for easier handling.

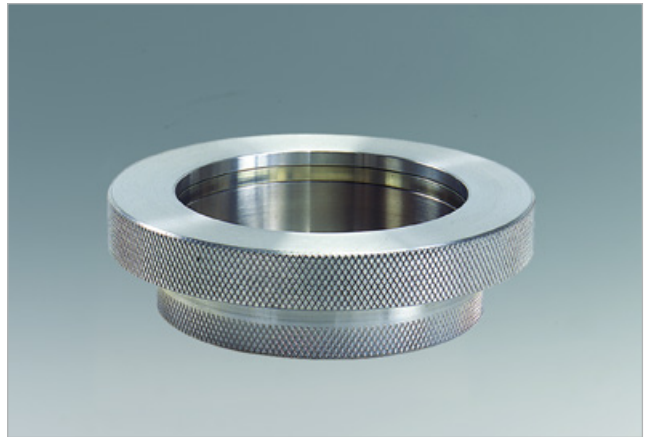
Two different size cups are available:

- Large 25 cm² cup meets the ASTM standard
- Small 10 cm² cup allows the use of a smaller specimen and less desiccant

Procedure

During a test, vapor passes from the cup through the film specimen to an open container of desiccant or other absorbent material in a controlled environment. The permeability cup and other container are sealed together in a larger container to provide control of the vapor pressure.

Testing may also be set up to allow passage of vapor from a solution in the open container through the test film to a desiccant or other absorbent material within the permeability cup.



Standards

ASTM	D 1653
ISO	7783-2

Ordering Information

Cat. No.	Description
2300	Permeability Cup S
2301	Permeability Cup L

Technical Specifications

Exposed Area	Dimensions	Net Weight
10 cm ²	6.3 x 2.5 cm (2.5 x 1 in)	76 g (2.7 oz.)
25 cm ²	8.1 x 2.5 cm (3.25 x 1 in)	129 g (4.6 oz.)

Comes complete with:

Threaded flange, Cup bottom, Retaining washer, Neoprene gasket, Polyethylene gasket, Operating manual

Ordering Information

Cat. No.	Description
2302	Polyethylene Gasket L
2303	Neoprene Gasket L
2304	Polyethylene Gasket S
2305	Neoprene Gasket S