i-Gastra 7100 Gas Permeability Tester---Paperboard Test

Scope

i-Gastra 7100 Gas Permeability Tester is designed to determine the gas transmission rate, solubility coefficient, diffusion coefficient, and permeability coefficient of plastic material in the forms of films, composite films, high barrier materials, sheets, and aluminum foils.

Test Procedures

A: Prepare test specimens according to specific standards. The test specimen should be of uniform thickness and should be free of wrinkles, creases, grease or other visible imperfections. The direction of permeation should be identified and if necessary, it should be marked on the specimen. Generally the gas shall permeate through the specimen from the outside in.

B: Apply vacuum grease to the outer surface evenly 2 mm around the groove in the lower test chamber.
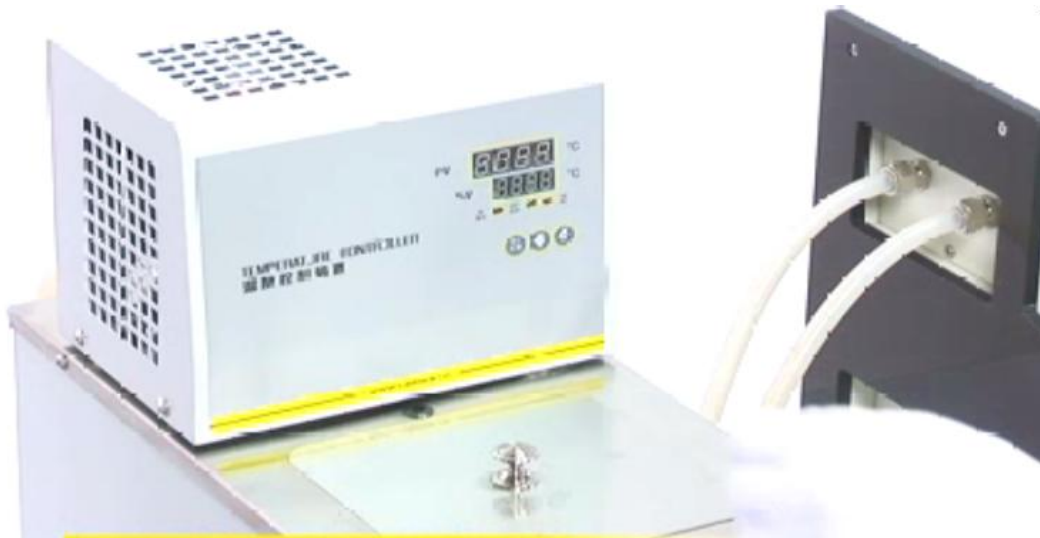
C: Place a piece of filter paper (diameter is 65mm) in the hollow groove and then place the prepared specimen on the lower test chamber. Make sure the test specimen contacts the lower test chamber tightly.

D: Close the upper test chamber and tighten it.

E: Set up the temperature controller so that the temperature required for the test could be reached. It is necessary to check the leak tightness of the water path.

F: Connect the vacuum pump with ripple tube and its components. Do not change the default settings of the vacuum pump which has been setup before shipment.

G: Set up test parameters, start the test and turn on the vacuum pump.

H: View the test results and reports. If necessary, repeat the above procedures to perform another round of tests. Turn off the vacuum pump when the vacuumizing process is finished.