

TOY-C2 Film & Package Oxygen Permeability Tester

TOY-C2 film & package oxygen permeability tester is designed and manufactured according to ASTM F1307, ASTM D 3985, ASTM F 1927, JIS K 7126 , ISO15105-2 and so on, it is applicable in oxygen permeability test of plastic films and finished packages (such as plastic bottles and plastic pouches) in air or in 100% oxygen.



Characteristics

Equal pressure principle which is more like actual production.

Function of temperature and humidity control.

High resolution, accurate test data.

Two test models such as package and film, and easy to change.

Professional software, perspicuous test course.

Test data is stored forever, easy to search and compare.

Users can get other gas permeation data by Labthink's technical support. Multifold functions in one.

Employs the best elements in the world, steady and reliable running.

LCD shows test parameters, friendly human-equipment interaction design.

Keep running while power down, free from the interference of power down.

Compatible with ISO, ASTM and various oxygen transmission test standards.

Principle

High pure oxygen flows on one side of the film, high pure nitrogen flows on the other side of the film. Oxygen molecule passes the film into the nitrogen of another side, and is taken to the sensor by the flowing nitrogen. Test the transmission of oxygen by analyzing the concentration of oxygen detected by sensor. As for packaging container, nitrogen flows in the container, air or high pure oxygen covers the outside of the container.

Technical Data

a. Film test

Test range: 0.01~2000ml/m²•day (normal)

0.1-20,000 ml/m²•day (optional)

Resolution: 0.01 ml/m²•day

Humidity control range: 0%RH; 15%RH~90%RH

Humidity control accuracy: ±2%RH

Temp. control range: 5°C~95°C,

Temp. control accuracy: ±0.1°C

Specimen size: Φ140mm, thickness<1mm (thicker .

specimen needs accessories)

Test area: 104.4cm² x (1~2)

Test condition: ambient condition

Dimension: 620mm(L) x 460mm(B) x 310mm(H)

Power: AC 220V 50Hz / 60Hz

Net weight: 50kg

b.Package test

Test range: 0.0001~50ml/pkg•day

Resolution: 0.0001 ml/pkg•day

Humidity control range: 0%RH; 15%RH~90%RH

Humidity control accuracy: $\pm 2\%$ RH

Temp. control range: 5° C~95° C

Temp. control accuracy: $\pm 0.1^{\circ}$ C

Bottle body: 100% O₂ test--- less than $\Phi 120$ mm, height is less than 360mm; in air --- no size limit.

Bottleneck: diameter of inner bottleneck $> \Phi 9$ mm, diameter of outer bottleneck $< \Phi 50$ mm (normal)

Pouches and boxes---supported by accessories

Istandard condition: 23°C

Power: AC 220V 50Hz / 60Hz

Dimension: 620mm(L) x 460mm(B) x 630mm(H)

Net weight: 50kg

Standards

ASTM D3985, ASTM F1307, ASTM F1927, ISO 15105-2, JIS K7126-B, GB/T 19789, YBB 00082003

configuration

Standard: mainframe, software, temperature controller, bottle accessories.

Optional: seal accessories

Note: Users provide test gas for themselves.