

PERME® ERT-01 Evaporation Residue Constant Weight Tester

ERT-01 Evaporation Residue Constant Weight Tester is professionally designed for the precisely quantitative determination of dissolved substances of table wares, containers, packaging films, cans, tubes and other food-use equipments in different soaking solutions. Polyethylene (PE), polystyrene (PS), polypropylene (PP), and chlorinated PVC resin are used as raw materials of such objects. By the further detection of evaporation residues, more dissolution indexes could be obtained to meet different application requirements of products. The instrument also supports Lystem™ Lab Data Sharing System, which ensures uniform management of test results and test reports.



Professional

- Proportional, standard and differential value modes are available for different test requirements of users
- 8 specimen tests could be performed simultaneously with automatic testing process, which greatly improves determination efficiency
- Test process can be simplified by automatic conduction of control test
- Automatic lifting structure design and periodically weighing method to reduce system errors
- Auto re-zero before each weighing ensures the accuracy of test results
- Special designs of hot wind circulation in test cells, auto temperature control and automatic dehumidification support various combinations of non-standard test conditions
- The instrument could perform weighing directly at high temperature to avoid human interference, and further ensure test accuracy
- Standard weight for fast and accurate calibration

High-end

ERT-01 utilizes Labthink's latest embedded computer control system that provides better performance than traditional single chip system.

- Embedded computer control system provides safer and more reliable data management as well as test operation
- The system utilizing Windows operating interface can be easily operated by a monitor, a keyboard and a mouse for convenient test operation and data display
- The system is equipped with four USB ports, dual Internet ports and scanning port for convenient input, output, and data transfer

Intelligent

The instrument is equipped with Labthink's latest intelligent operating software, with user-friendly operating interface and intelligent data management. It also supports Lystem™ Lab Data Sharing System, which ensures

uniform management of test results and test reports.

- Intelligent reminding of sensor calibration makes a comfortable operating environment
- Embedded help document for user viewing at any time
- Multi-level account control for better data management and protection
- The usages of instrument could be totally recorded by professional storage device which could provide technique support for different tracing work.
- The system utilizes embedded data saving technology to save detailed information and provide convenient and various searching and viewing functions.
- Supports Lystem™ Lab Data Sharing System for uniform and systematic data management

Test Principle

Soak the specimen into solution according to related requirements. Take out certain quantity of soaking solution and inject into conditioned evaporating dish which has been dried in high temperature oven and comes with constant weight. Dry the evaporating dish with soaking solution on water bath, prior to placing it into high temperature oven for further drying and weighing. Continue the dry and weigh operation until the weight of evaporating dish reaches constant. The quantity of evaporation residues could be obtained by reducing mass of empty dish from the final constant dish mass.

This instrument conforms to many national standards: GB/T 5009.60-2003, GB/T 5009.64-2003, GB/T 5009.68-2003, GB/T 5009.69-2008, GB/T 5009.203-2003, and GB/T 9740-2008

Applications

Basic Applications	Food Package Test	Evaporation residue test of food packages, table wares, packaging films and others which are made from PE, PS and PP
	Sealing Gaskets of Food Cans	Evaporation residue test of sealing gaskets of bottles and cans for food, including packages for drinks, wine and other flavoring
	Coating and Food Packages	Evaporation residue test of food packages which are made from chlorinated PVC resin, including chlorinated PVC resin inner coatings, food packages
	Coating Iron Sheet	Evaporation residue test of epoxy-phenol resin paint coated inside of food cans, including coating iron sheet
	Packages for Plant Fiber Food	Evaporation residue test of food packages made from plant fiber pulp
	Chemical Reagents	Evaporation residue test of samples in different chemical reagents which could evaporate in boiling water bath and dissolve most of samples

Technical Specifications

Test Range	0~80g (residue weight)
Accuracy	0.3 mg
Resolution	0.1 mg
Test Temperature	100°C~ 130°C (standard)

Accuracy	±0.2°C (standard)
Air Velocity	0.2 m/s
Specimen Volume	0 ~ 200 mL
Number of Specimens	1~8 pieces (with independent test results)
Test Chamber Size	64 L
Gas Supply	Air
Gas Supply Pressure	0.6 MPa
Port Size	Φ6 mm PU Tubing
Instrument Dimension	826 mm (L) x 727 mm (W) x 755 mm (H)
Power Supply	AC220V 50Hz
Net Weight	150 kg

Configurations

Standard Configurations	Mainframe, Professional Software, Standard LCD Monitor, Keyboard, Mouse, Evaporating Dish, Automatic Moisture Filter, Standard Weight, Valve Sets and Wireless Data Interface
Optional Parts	Air Compressor and Printer (compatible with PCL3)
Note	<ol style="list-style-type: none"> 1. The gas supply port of the instrument is Φ6 mm PU tubing; 2. Customers will need to prepare for gas supply.

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