Fogging tester FT-F1

The fogging tester is for high-temperature volatilizable constituent evaporation evaluation of the inner decoration components in automotives and aircrafts, including automotive inner plastic decoration components, polyurethane, textiles, leather, adhesives, non-woven and thermal forming elastomers, etc., as well as for fogging testing of automotive front high intensity discharge (HID) lamp.

Principle

The specimen is heated in the glass beakers and begins to evaporate; the volatile constituents condense on the glass plate or foil that has been cooled by the cooling chamber. After the cooling process, take off the glass plate or the foil. Through measuring the fogging value or weight of the condensed constituent on the glass plate or foil, and comparing with the data before condensation, the volatility of the specimen can be achieved.

Testing methods

Gloss method

The specimen is heated in the glass beaker; its evaporated constituents are condensed on the low temperature glass plate. Through the comparison and calculation of the gloss values before and after condensation, the fogging value of the specimen can be obtained.

Fogging method

The specimen is heated in the glass beaker; its evaporated constituents are condensed on the low temperature glass plate. Through the comparison and calculation of the fogging values before and after condensation, the fogging value of the specimen can be obtained.

Weighing method

The specimen is heated in the glass beaker; its evaporated constituents are condensed on the low temperature foil. Through the calculating the changes of foil's weight before and after condensation, the weight of the condensed constituents can be obtained.

Features

- 6 test chamber design, simultaneous specimen test and blank test
- Stable operation, accurate data
- High precision temperature control

Structure

The FT-F1 consists of high-temperature constant temperature bath, low-temperature constant bath, cooling plate, glass beaker, glass plate, reflectmeter, sample cutter and other accessories; this tester can accomplish sampling, heating, condensation and testing processes.

Technical specifications

High temperature bath range

Room temperature~150°C

(Optional: Room temperature~280°C)

Resolution of high temperature bath

+0.1°C (150°C)

Low temperature bath range

0~100°C

Resolution of low temperature bath

+0.1°C

Power

AC 220V 50Hz /60Hz

Physical specifications

Dimensions of high-temperature bath

670(L) mm x 490(B) mm x 540(H) mm

Dimensions of low-temperature bath

400(L) mm x 220(B) mm x 520(H) mm

Net weight of high-temperature bath

32kg (not include heat-transfer medium)

Net weight of low-temperature bath

15kg (not include heat-transfer medium)

Configuration

Standard

mainframe, constant temperature controller, sample presser, glass beakers, fluorine rubber sealing ring, metal ring, square glass plate, round glass plate, aluminum foil, aluminum foil sample cutter, lid, glass plate shelf, sample cutter, glossmeter, heat medium oil, DOP, accessory shelf.

Optional

glass beakers, fluorine rubber sealing ring, square glass plate, round glass plate, aluminum foil, aluminum foil sample cutter, glass plate shelf, heat medium oil, gloss-meter, electronic balance (0.01mg), DIDP, DOP, accessory shelf.

Standard

DIN 75201, ISO 6452, SAE J1756, QB/T 2728, BS EN 14288, PV 3920, PV 3015, ES-X83231, NES M0161, D45 1727, GM 9305P, TSM 0503G