

Optima -M4/M6 Sulfur Dioxide Distillation Titrator

PRODUCT OVERVIEW

Optima-M4/M6 sulfur dioxide distillation titrator is based on "National Food Safety Standard: Determination of Sulfur Dioxide in Food GB 5009.34-2022 and Pharmacopoeia of the People's Republic of China Part IV General Rule 2331 Sulfur Dioxide Strong Residual Determination Method Provided assay design. Integrating the functions of heating, distillation, cooling water circulation, nitrogen purging, magnetic stirring and acid-base titration, the food and Chinese medicinal materials are treated by distillation and the sulfite series substances in the sample are converted into sulfur dioxide after acid treatment. It is brought into the absorbing bottle containing hydrogen peroxide with nitrogen flow and the hydrogen peroxide oxidizes to sulfate ion. It is measured by acid-base titration to calculate the residual amount of sulfur dioxide in food or medicine and decoction pieces. The instrument is mainly suitable for all kinds of food testing, drug testing, drug production enterprises, scientific research institutes, and food production enterprises related to sulfur fumigation, for the routine determination of sulfur dioxide residues.



TECHNICAL CHARACTERISTICS

Unattended

The system automatically completes the steps of heating, distillation, temperature control, cooling water circulation, distillation end point identification and stirring.

Heating module

Adopt advanced far-infrared ceramic radiation heating technology, no open flame, low power consumption, high efficiency, long life, uniform heating, not easy to bump, corrosion resistance. The heating components can be controlled separately without interfering with each other.

Cold water circulation module

External cooling water: external cooling circulating water machine, easy to operate and flexible to use.

Receiving liquid anti-suck back When the receiving liquid reaches the set end point, nitrogen gas will not be automatically turned off, effectively preventing the receiving liquid from backsucking.

Receiving mode

Timed distillation :(0-600) minutes can be arbitrarily set, according to the set time, the distillation will automatically stop.

Intelligent human-computer interaction

There are six built-in distillation methods in the distillation apparatus, which can be directly selected without frequent input of repeated data. The method can also be customized and saved according to the experimental requirements.

Nitrogen control system

Automatically control the opening of nitrogen, without manual operation, the instrument has a built-in flow control device, which can accurately adjust the nitrogen flow, and can also be connected to the nitrogen generator for use.

Built-in magnetic stirring

Built-in magnetic stirring function, through the screen control, you can turn on all magnetic stirring or single-channel magnetic stirring, and control the magnetic stirring speed.

External LCD touch screen

The display is placed outside the body of the instrument, which is easy to take and can effectively prevent the spilled liquid from corroding the display screen.

Automatic acid addition

Accurate quantitative acid addition, full response, and reduce errors.

INSTRUMENT PARAMETERS

Model number	Optima-M4	Optima-M6
Dimension	890 x510x 878mm 1290X 510x 878mm	
Operating voltage	AC220V 50HZ	
Power control	Single channel 0-500W adjustable power changeable in real time	
Rated power	2000W	3000W
Heating unit	Four-position single	Six-position single
Nitrogen flow rate	channel single control	channel single control
Nitrogen control	0-2L/min	
Terminal control	Standalone rotameter controls flow rate	
Time control	timing	
Acid adding method	Single hole 0-999min adjustable	
Automatic acid addition	Liquid shortage reminder, automatic filter air bubbles, accuracy +0.1mL, repeatability<1%	
Control mode	7 inch free LCD touch screen	