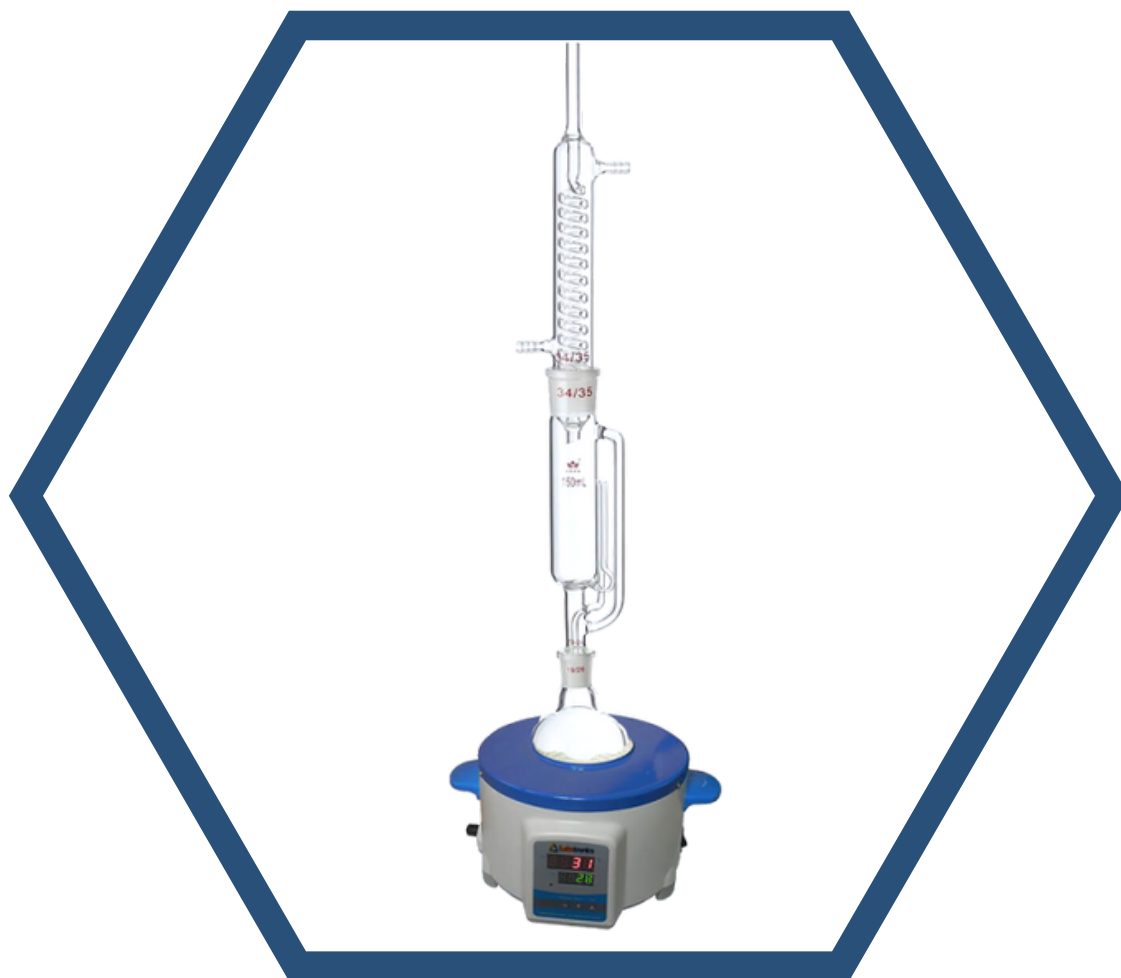




Soxhlet Extraction Heating Mantle LB-10SHM

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1. Safety Measures

- Kindly read the entire instruction manual before operating the heating mantle.
- Use an electrical outlet with a fuse or circuit breaker and ground fault interrupt circuit (GFCI).
- Disconnect the mantle from the power supply before maintenance and servicing to avoid personal injury.
- Don't use in the presence of flammable or combustible materials, fire or explosion may result.
- Refer servicing to qualified personnel only.
- Flask or vessels should be handled with care. Appropriate safety clothing, glasses, gloves, and coats should be worn when operating all mantles.
CAUTION! To avoid electrical shock, completely cut off the unit's power by disconnecting the power cord or unplugging it from the wall outlet. Disconnect the unit from the power supply before maintenance and servicing. Spills should be removed promptly after the unit has cooled down.
CAUTION! The heating mantle can reach 400°C, do not touch the heated surface. Always use caution. Keep the unit away from explosive vapors and clear of papers, drapery and other flammable materials. Keep the power cord away from the heating mantle.
- Do not operate the unit at high temperatures without a vessel/sample in the heating mantle.
- Turn the heating power button off first, and then the stirring power button when the heating mantle cooled down.
- Smoke and pungent smell will occur when first time use.
- It is normal for the changed brown or yellow color of the inner sleeve of the heating mantle when the heating mantle temperature exceeds 100 degrees, and the color can be returned when it works over 200 degrees.

2. Introduction

Soxhlet Extraction Heating Mantle LB-10SHM is designed with a 500 ml volume and operates within a temperature range from 100°C to 450°C. It supports a maximum extractor capacity of 250 ml and accommodates flasks with diameters between 102 mm and 105 mm. The PID auto control system maintains precise and stable temperature regulation. Our soxhlet extraction heating mantle equipped with a clear and precise digital LCD display for easy temperature monitoring.

3. Features

1. Compact and easy to operate
2. Integrated control system
3. Nickel-chrome heating element
4. Alkali-free glass fiber inner sleeve
5. Acid-resistant coil

4. Specifications

Model No.	LB-10SHM
Flask Volume	500 ml
Temperature Range	100°C to 450°C
Temperature Accuracy	± 1°C
Extractor Capacity	250 ml
Condenser Length	Approximately 250 mm
Flask Diameter	102 to 105 mm
Flask Inside Depth	65 mm
Working Temperature Range	RT to 40°C
Temperature Display	Digital LCD Display
Inner Sleeve Material	Alkali-free glass fiber
Temperature Control	PID Auto Control
Thermocouple Probe	PT100, with inner and outer thermocouple
Heating power	220W
Power Supply	220V/ 110V
Dimensions	430 × 280 × 250 mm
Weight	4 kg

5. Applications

Soxhlet Extraction Heating Mantle is used to heat samples for extraction processes in laboratories, chemical industries, pharmaceutical, and environmental research.

6. Instrument Introduction



Figure-1 Instrument appearance

7. Installation

Upon receiving the heating mantle, check to ensure that no damage has occurred in shipment. Any damage that occurs in transport must be detected at the time of unpacking. After unpacking, place the heating mantle on a level bench or table, away from explosive vapors. Ensure that the surface on which the unit is placed will withstand typical heat produced by the unit and place the unit a minimum of 30 cm from vertical surfaces. Always place the unit on a sturdy work surface. The heating mantle can be plugged into a properly grounded outlet. The 110V unit plugs into a 110-volt, 50/60 Hz source. The 220V unit plugs into a 220-volt, 50/60 Hz source.

Environmental Conditions

Operating Conditions: Indoor use only.

Temperature: 5 to 40°C (41 to 104°F).

Humidity: 20% to 80% Relative humidity, non-condensing.

Altitude: 0 to 6,562 ft (2000 M) above sea level.

Non-Operating Storage:

Temperature: -20 to 65°C (-4 to 149°F)

Humidity: 20% to 80% relative humidity, non-condensing.

8. Operations

8.1 Setting the instrument

- 1) Place a vessel with a solution and the appropriate accessories in the center of the heating mantle.
- 2) Plug the power cord into a properly grounded outlet.
- 3) Put the inner thermocouple on the heating mantle if it is not on it.

8.2 Operating instruction

8.2.1 Set temperature adjustment

- 1) Turn on the power button for heating in the lateral (as in the following **Figure 2**)
- 2). PV windows display the ambient temperature, and SV displays the set temperature last time.



Figure-2

- 2) Press “” or “” button for 3 seconds to quickly set the temperature you require. SV windows display the set temperature, and PV displays the inner heating mantle temperature. LED display, the LED will turn off when the inner heating mantle temperature reaches the set temperature. The digital parts are as follows:



Figure-3

- 3) The heating mantle stops working when the liquid temperature reaches the set one and can work again when the liquid temperature is below the set one.
- 4) Pull out the inner thermocouple at the back of the heating mantle, and the heating mantle Stop working. The SV display the last time the set temperature and the PV display “HHH”

8.2.2 Measure the liquid temperature adjustment

- 1) Pull out the inner thermocouple by hand. the PV windows display HHH, and the SV windows display the set temperature last time.



Figure-4

- 2) Connect the outer thermocouple 4 holes with the heating mantle 4 pins.
- 3) Put the other stainless-steel part of the outer thermocouple into the liquid you measured.
- 4) The PV windows display the measured temperature.

9. Accessories

Standard Accessories

Photos	Item	Quantity
	Inner Thermocouple 4 -spin	1 pc
	Outer K Type Thermocouple 4-spins Stainless Steel Length: 235mm Wire length: 1000mm	1 pc

Optional Accessories

Photos	Item	Quantity
	Can be Removed Holder 1. Length 280mm 2. Diameter 10mm 3. Material: Stainless steel.	1 pc
	Clamp with screw	1 pc



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