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User Manual of Xianghu Microwave Instrument

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Xianghu Microwave Instrument with Computer Controlled System for Synthesis and Solvent Extraction



Instruction:

XH-100B microwave instrument was designed for catalyzing organic synthesis and solvent extraction. This instrument was equipped with the most advanced microwave technologies and computerized contact temperature sensor with precision at $\pm 1^{\circ}$ C. The internal material employed has excellent high temperature and corrosion resistance. Most importantly, the whole system has been demonstrated microwave leak-free and meets state standard.

Technical Parameters:

- 1. Adjustable microwave power 100-850W
- 2. Reaction temperature range: 0-300°C
- 3. Store up to ten reaction conditions
- 4. LCD display
- 5. Record and print out all reaction conditions including temperature, reaction time, microwave power, temperature rate, etc.
- 6. Real reaction temperature monitoring with computerized contact temperature sensor with precision at 0.2°C

Organic Reactions Catalyzed by Microwave

This instrument has been widely used in a variety of organic reactions, such as addition, substitution, esterification, hydrolysis, polymerization, condensention, cyclization and oxidation, etc.

Features of the Microwave Catalyzed Reaction

- 1. Fast
- 2. High selectivity
- 3. High yield

- 4. Enhance the reactivity
- 5. Easy work up

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The main technical criteria of the product:

- 1. Power range:100-850w(divided 10 steps)
- 2. Temperature range:0-300℃
- 3. Precision of temperature measurement:≤±0.2°C Precision of controlled temperature: <±1°C
- 4. Reaction dimension:50-1000ml
- 5. Stainless steel cavity: anticorrosion and high temperature resistant
- 6. LCD screen displaying reaction condition and temperature curve
- 7. Storage of ten reaction conditions can be printed at anytime
- 8. Magnetic stirring with different velocity which make the reaction completeness and the temperature equalization
- 9. Friendly human-machine interface simple and convenient keyboard operation: according to the screen cue completing the operation process easily
- 10. Platinizing contacting temperature sensor: high precision and monitoring the temperature at anytime
- 11. Advanced computer self-learning technology: intelligently automatic controlling the heat preservation power
- 12. Open system: installing dropping funnel and condenser tube
- 13. Safety: microwave leak measure up nation standard

Configuration list

Basic configuration				
Name	Quantity	Name	Quantity	
Host machine	1	Printer guides	2	
Sensor	1	Printer scroll	1	
Stainless steel vertical post	1	Polytetrafluoroethylene plug	1	
Three-claw test clamp	1	250V/10A Fuse	2	
Cross clamp	1	Magneton	1pack	

Polytetrafluoroethylene gasket	1	Dustproof shield cover	1	
T-piece glass pipes	2	User's guide	1	
Plastic clamp	3			
Certificate	1			
Optional configuration				
Printer				