BUCK Scientific

Alchemist 4000

Microwave Preparation System



Overview

Our Latest microwave digestion system (The Alchemist 4000) is the culmination of over 20 years of continuous refinement.

- Powerful 3000 Watt output
- Advanced Safety Systems
- Easy Access to Vessels
- Top Load Design for Superior safely
- Tool-less Finger Tight Vessel



Features

• The powerful Alchemist 4000 has 3000 watts of fully adjustable power output (0-3000 watts) to tackle the toughest digestions.

• Our advanced Safety features ensure the safest possible working environment for you and your samples. The Alchemist 4000 will automatically adjust power output when heat or pressure parameter limits are achieved.

• The ergonomic top-loader design makes our system easier to use, simply remove one vessel at a time without the hassle of lifting a heavy carousel.

• Our patented finger tight vessels require no tools, and eliminate contamination worries with wireless real-time temperature and pressure monitoring.

Program Method									
1.General digestion method 2.Pure milk	Steps	Pressure (Bar)	Temperature (°C)	Power (W)	Heat-time (s)	Hold-time (s)	Program	No.	ad 门
2.7 2.2 1000	1	5	100	1000	300	60	7	8	9
3.Skimmed milk powder	2	10	150	1000	240	60	<u> </u>	Ľ	
4.Herb	3	20	180	1000	240	600	4	5	6
5.Medicine : Capsule	4	0	0	0	0	0	1	2	3
6.Meat	5	0	0	0	0	0			~ /
7.Soil	6	0	0	0	0	0	0	I	\times
8.Water	7	0	0	0	0	0	\sim		
Esc	8	0	0	0	0	0	Save 💾		
	9	0	0	0	0	0			
	10	0	0	0	0	0	Apply 💿		



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Safety Features

Our patented finger tight vessels are designed to be the safest and easiest to use on the market.

Each vessel is temperature and pressure are continuously monitored to keep sample temperature and pressure within the pre-set ranges input by the user.

The high-tensile steel door features double interlocks which ensure operator safety.

Audible Anomaly Detection System will notify the user with alarm in case of vessel rupture.



Easy Tool-less Vessels

System Details

The on-board computer can store and edit up to 255 user pre-set methods for fast and easy operation.

Each preset method has parameters for time temperature, pressure and microwave power (0-3000 watts).

Our 360 degree carousel ensures even heating and also an extended motor life since there is no continuous stopping and starting.

The 7" (17.78 cm) color touchscreen displays real-time temperature and pressure reading of each vessel, along with working time and tendency curves.

TFM coated 3/16 stainless steel construction ensures years of corrosion resistance.

Model	Alchemist 4000					
Vessel Quantity	1-40 vessels					
Vessel Volume	50ml					
Temperature Monitoring system	Contact-less Infrared Sensor					
	Real time temperature reading & control of each					
	vessel.					
Temperature controlling range	50-400° Celcius					
Display Accuracy	within 0.1° Celcius					
Pressure Monitoring system	Contact-less pressure monitoring					
	Real time pressure reading & control of each					
	vessel.					
Pressure control Range	0-10MPa					
Pressure monitoring accuracy	0.01MPa					
Display Accuracy	0.01MPa					
Inner sample cup material	Modified PTFE (TFM)					
Outter Vessel material	Fiberglass - Peak composite					
Display	7 Inch Color touchscreen					
Rotation	360° continuous rotation for longer motor life					
Microwave Chassis	316 Stainless Steel with triple TFM coatings					
Microwave power output	0-3000 Watts of fully adjustable power					
Microwave leakage	<5mw/cm2					
Exhaust system	High powered corrosion resistant blower					
Power requirements	220V 60 Hertz					
Dimensions	25x25x24 inches					
Weight	172 Lbs					



