

PreeKem



M3

M3

Intelligent Microwave
Digestion System



M3

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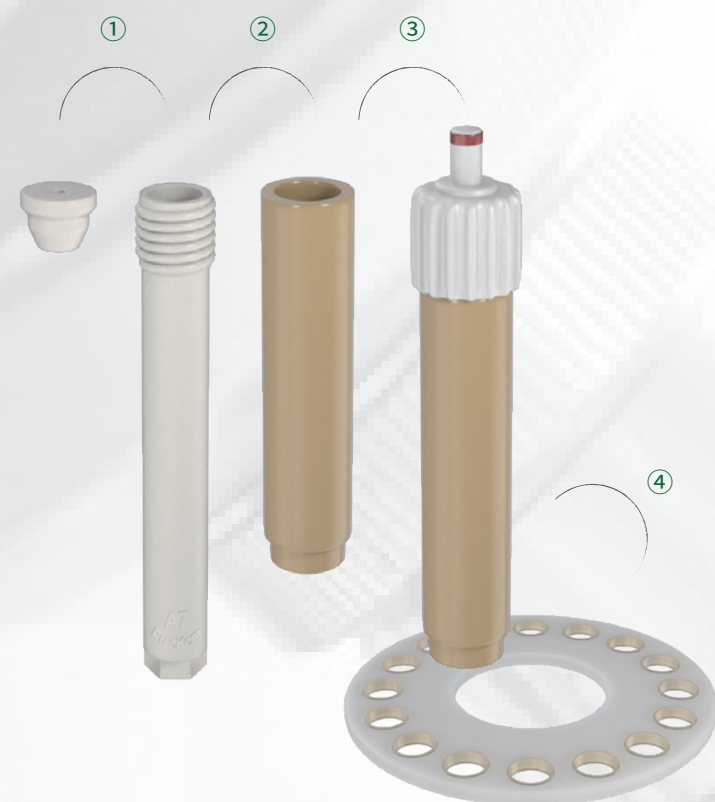
Web: www.preekem.com/en



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Simpler handling, safer digestion



Economy

Occupy less space, higher energy efficiency, reduced operating cost

Performance

Uncompromised digestion capability by 10 high pressure vessel or 16 high throughput vessel

Efficiency

Rapid batch digestion and cooling (< 1 hour) for all sample types

Easiness

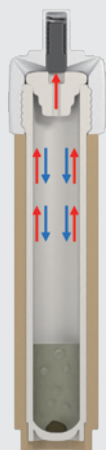
A simple 4-step procedure allows fast (<3 min) and safe assembly of 16 vessels



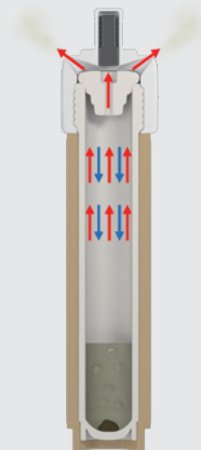
All-Around Digestion Safety Guarantee

Instant pressure management in all vessels

Proprietary vent-and-seal technology ensures all vessels operate under safe and secure environment throughout the digestion.



Fully sealed



Venting in action

Complete infrared-based temperature solution

Rtemp enhanced IR sensor revolutionizes temperature monitoring in microwave digestion



Rtemp sensor's excellent IR penetration of TFM wall allows temperature of the digestion solution being detected directly



Conventional IR sensor measures the temperature of TFM wall only

M3

OVEN BODY

5-year corrosion-free warranty

- 316L Stainless Steel oven body construct
- Seamless Laser Soldering
- 5-Layer Premium Teflon Coating



Microwave Emitter

Proprietary Microwave Focusing

- Optimized single-magnetron heating
- Creative microwave guiding technology to streamline the energy density and distribution
- Delivers rapid, safe, and reproducible batch digestions

ENHANCED SAFETY DESIGN

Buffered Safety Door Concept

- Floating Safety Lock
- Automatic depressurize and re-close
- Secure microwave emission upon fully closed door



Microwave in action

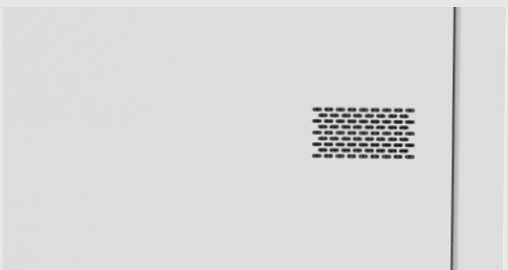


Microwave paused

The Art of Cooling

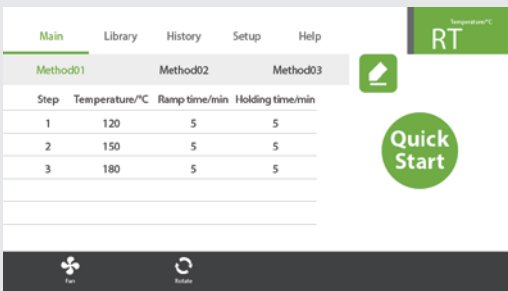
TwinAir technology

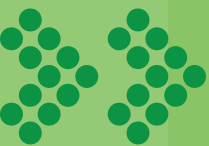
- Rapid duo airway cooling
- Streamlined air passage
- Automatic airflow rate control
- Max 10 min to safe temperature



Hassel-free operation software

- Intuitive software interface
- Pre-loaded method library
- Simple method setup, edit, retrieval
- Fast track of three recent methods





Patented reaction vessel design



- Completely tool-free vessel assembling



- Individualized vessel ID
- Unique hexagonal vessel bottom for easy vessel handling



High performance rotor HP10

- Greater temperature and pressure tolerance for tough sample matrices
- Digest 10 difficult samples in a single batch
- Powered by Rtemp super IR technology
- Contactless and real-time T/P control in full vessel set



Rotor	HP10
# of vessels	10
Vessel material	TFM
Protective sleeve material	Reinforced PEEK
Vessel volume	100 ml
Max withstanding temp	330C
Max withstanding pressure	150 bar

High throughput rotor GT400

- Max 16 samples in a single batch
- Powered by Rtemp super IR technology
- Contactless and real-time T/P control in full vessel set



Rotor	GT400
# of vessels	16
Vessel material	TFM
Protective sleeve material	Reinforced PEEK
Vessel volume	60 ml
Max withstanding temp	330C
Max withstanding pressure	120 bar

Specifications

Touch screen	7' High def colour LCD
Microwave oven	Industrial grade resonance oven
Oven body	316L Stainless Steel
Microwave frequency	2450MHz
Microwave emission mode	Unpulsed, ±1W
Microwave control mode	PID control
Ambient temperature	5-40C
Ambient humidity	15-80% RH
Dimension of mainframe	615(H) × 452(W) × 499 (D) mm
Net weight	70Kg