Microwave Digestion System - Compact 8 Vessel Digester - 1000 W - 250°C, 5 MPa

Model **MSMDS-100-R8SWISS** | Brand **Master Science**





The Master Science 8-Vessel Microwave Digester is a compact closed-vessel system that heats acids and samples with microwave energy until solid or complex organic and inorganic materials become clear solutions ready for elemental analysis. It suits laboratories with moderate sample numbers that still need full temperature and pressure control.

KEY HIGHLIGHTS

- Even heating
- True sample temperature
- Handles difficult samples
- Quick cool-down
- Simple loading

AT A GLANCE

Room temperature to 250 °C
TEMPERATURE CONTROL

infrared reading of every vessel.
GUESSING SAMPLE TEMPERATURE

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

A mid-infrared sensor reads the true temperature of each sample through the TFM vessel wall, and each vessel has its own pressure limit and relief.

> For high-throughput labs, see the Master Science 40-vessel microwave digestion workstation.

Overview

- Focused microwave heating
- Per-vessel pressure limit
- Temperature curve display

Key Benefits

Even heating
focused microwave design in the Master Science 8-Vessel Microwave Digester.

True sample temperature
mid-infrared sensing through TFM.

Handles difficult samples
sealed vessels hold pressure during digestion.

Quick cool-down
high-flow corrosion-resistant exhaust.

Simple loading
vessels go in one by one without removing the rotor.

Technical Specifications

GENERAL

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SKU	MSMDS-100-R8SWISS
Number of Vessels	8
Vessel Volume	100 mL
Vessel Material	Inner TFM (base ≥ 18 mm), outer PEEK
Vessel Rating	≥ 300 °C, ≥ 15 MPa
Temperature Measurement	Room temperature to 400 °C, 0.1 °C resolution
Temperature Control	Room temperature to 250 °C
Pressure Control	0 to 5 MPa
Cavity	316L stainless steel, laser welded, multi-layer PFA coating
Rotor	360° continuous rotation
Methods	100 stored methods, up to 10 stages each
Working Environment	5 to 40 °C, 15 to 85 % RH

POWER

Microwave Power	≤ 1000 W, continuous non-pulse, 0 to 100 % adjustable
Microwave Frequency	2450 MHz
Power Supply	220 to 240 V AC, 50/60 Hz, 10 A, 1500 W

COMMON LABORATORY PROBLEMS AND HOW THIS SYSTEM HELPS

Common Laboratory Problems and How This System Helps	How the Master Science 8-Vessel Microwave Digester answers sample preparation problems:
Open-vessel losses of volatile elements	closed TFM vessels.
Uneven heating	focused microwave field.
Guessing sample temperature	infrared reading of every vessel.
Long cool-down	high-flow exhaust fan.

Applications

The Master Science 8-Vessel Microwave Digester prepares samples from: Environmental samples Food and feed Plastics, polymers and cosmetics Metals, alloys and geological samples Petrochemical products

Safety

- Explosion-proof side-opening door with floating buffer
- Over-temperature and over-current protection
- Abnormal noise detection and fault alarm

Control

- Built-in touch screen
- 100 methods with 10 stages
- Power correction and temperature calibration