



# DIGESTION: FOCUSED ON WHAT MATTERS





Single Reaction Chamber Microwave Digestion System











# SRC PERFORMANCE FOR EVERY LABORATORY

# A PROVEN TECHNOLOGY, REDEFINED

Microwave closed-vessel digestion has become a cornerstone of sample preparation over the past three decades. As laboratories face a growing variety of samples and tighter limits, Milestone pioneered a better way: Single Reaction Chamber (SRC) technology. First introduced with the ultraCLAVE and later adapted to benchtop systems through successive ultraWAVE models, SRC is now trusted by thousands of laboratories worldwide.

The ultraWAVE 2 eco brings these core advantages to routine and regulated workflows in an accessible, right-sized design. It delivers dependable digestion performance, simplified daily operation, and flexible capacity for food, environmental, pharma, polymers, and more, making Milestone SRC the practical choice for modern laboratories.



**RELIABLE RESULTS** • Uniform conditions

**SIMPLIFIED OPERATION** • Easy handling

**FLEXIBLE DIGESTION CAPACITY** • Racks for any workflow

**FULL CHEMISTRY COMPATIBILITY** • All common acid mixtures

**SUSTAINABLE DESIGN** • Lower acids, lower energy

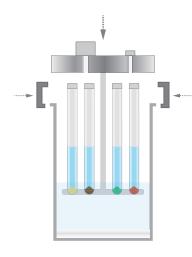
# ONE CHAMBER UNIFORM CONDITIONS RELIABLE RESULTS

# HOW SRC TECHNOLOGY WORKS

At the core of the ultraWAVE 2 eco is Single Reaction Chamber (SRC) technology. Unlike traditional microwave digestion systems, all samples are digested together in one high-pressure PTFE-lined stainless-steel chamber. This ensures that every vial is exposed to identical temperature and pressure, eliminating differences between samples and improving reproducibility. Because the chamber is pre-pressurized with inert gas, the system safely reaches higher temperatures compared to conventional digestion systems. This suppresses boiling, avoids the loss of volatile elements, and prevents cross-contamination. The result is complete digestions, lower acid consumption, and faster turnaround times, for routine, rush and even for reactive samples.

## 1. LOAD

The rack with sample and reagents is placed into the system.

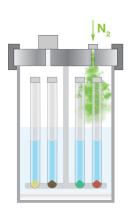






# 2. CLOSE & PRE-PRESSURIZE

The chamber is closed and filled with inert gas.

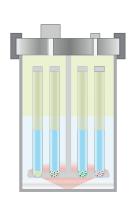






# 3. HEATING & CONTROL

Microwave power drives digestion, with conditions monitored by an internal thermocouple.

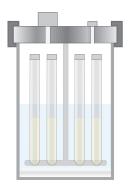


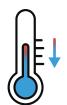




# 4. COOLING & VENTING

The integrated air cooling rapidly cools the reactor and then is automatically vented.







# **I KEY TECHNICAL FEATURES**

The UltraWAVE 2 eco combines a proven stainless-steel reactor design with smart engineering to deliver robust performance and simplified operation. With enhanced cooling efficiency, full chemistry compatibility, and an

intuitive terminal, it is built to support both routine and occasional workflows while promoting sustainable laboratory practices.

### **FLEXIBLE CAPACITY**

Racks from 4 to 26 positions adapt to both sample load and sample type.

### **FULL ACID COMPATIBILITY**

Handles all common acid mixtures, including  $HNO_3$ ,  $H_2O_2$ , HCI, and HF, for a broad range of applications.

## **HIGH PERFORMANCE**

Robust stainless-steel reactor with PTFE liner and cover ensures durability and reliable digestion in full safety.

### **EFFICIENT AIR COOLING**

The heat exchanger mounted on the reactor secure fast and efficient cooling.

## **INTUITIVE USER INTERFACE**

easyCONTROL 3 offers customizable home pages, method libraries, and quick start options for routine applications.

