

**Sample
preparation**



Solutions for chemists

Sample preparation systems

Multiwave 7000 – Microwave digestion at its best

Complete digestion for all kinds of samples in one single run

All samples – in one run – using the same method: the pressurized digestion cavity (PDC) for temperatures up to 300 °C and pressures up to 199 bar revolutionizes your sample preparation workflow.

- Budget-friendly pressure-sealed vials with plug-on caps
- Different volumes and racks with up to 28 positions to maximize the sample throughput
- Compact design with integrated cooling system to minimize the cooling time
- With ready-to-use methods and customized application support

Multiwave 5000 – One system, endless possibilities

The most user-friendly microwave reaction platform

Multiwave 5000 is designed for acid digestion and leaching of samples with varying difficulty or volume, but also applications such as evaporation, microwave-induced oxygen combustion, and extraction.

Adapt the system according to your needs thanks to the broad portfolio of rotors and accessories.

- Comprehensive interactive method library with full-text search
- More than 500 pre-installed methods
- Customizable and intuitive user interface
- Unique hands-free door opener
- Easy-to-handle compact rotors and vessels
- For the highest throughput to boost your productivity

Multiwave GO Plus – Ready, steady, go!

The world's smallest and most economic microwave for digestion

Multiwave GO Plus combines the best of two technologies: the fast heating of a monomode reactor with capacity to heat up multiple samples like a multimode system due to its patented (EP2854478 B) Directed Multimode Cavity (DMC).

Multiwave GO Plus is the easiest ready-to-use microwave on the market. It provides:

- Automatic adaption of the microwave field to the number of filled or empty positions (including the filling state of the vessel)
- Sample cooling in less than eight minutes for a fully loaded twelve-position rotor, for example for EPA methods.
- Unique pressure-release vessels (SmartVent technology)

Multicube 48 – trendsetting open-vessel digestion

Multicube 48 is a robust laboratory hot block for acid digestion, evaporation, and concentration of samples. The high temperature homogeneity of ± 1 °C over the whole block ensures the same digestion quality for all samples.

High-purity, low-cost disposable vials providing the lowest metal blanks to eliminate the risk of external contamination can be used for weighing, digesting, and storing digested solutions and also as volumetric flasks to fill samples to the appropriate volume for further analysis.

Ball Mill 500 – the all-rounder for milling and homogenization

Used for the milling and homogenization of a broad range of samples prior to analysis, ball mills are advantageous for preparing samples perfectly for subsequent preparation steps such as extraction, digestion, and filtration, and/or for subsequent analysis.

Ball Mill 500 is used for dry, wet, or cryogenic grinding depending on the source material's state. It covers inorganic as well as organic and biological samples in different feed sizes.



	Multiwave GO Plus	Multiwave 5000	Multiwave 7000
Technology	Directed Multimode Cavity (DMC)	Multimode Cavity	Pressurized Digestion Cavity (PDC)
Convenience and ease of use	Easy and simple interface Tool-free vessel handling	Intuitive user interface with full-text database search and software guidance Tool-free vessel handling	Software guides you through the whole digestion process Vials with plug-on caps
Throughput	Medium – 12 samples in less than 20 minutes	Highest sample throughput for routine samples (41 positions) and demanding samples (20 positions)	High – up to 28 samples in a single run
Portfolio	Rotor 12HVT50 (PTFE-TFM)	Unrivaled portfolio with wide selection of rotors, vessels, and accessories	Different racks, vials, and vessels available (disposable glass, quartz, and PTFE-TFM)
Temperature range	Up to 250 °C	Up to 300 °C	Up to 300 °C
Vessel/vial volume	50 mL	5 mL to 100 mL	7 mL to 80 mL
Applications	Acid digestion Acid leaching	Acid digestion Acid leaching Evaporation Drying Oxygen combustion Solvent extraction Synthesis Stirred reactions	Acid digestion Acid leaching Stirred reactions
Samples	Wide range of routine samples – especially food and environmental material	All kinds of samples (depending on rotor) organic and inorganic samples, microsamples	All kinds of samples organic and inorganic samples

Providing clear solutions for all types of samples



Superior global support and service

With over 30 subsidiaries and more than 50 distribution partners we are active in over 110 countries worldwide.

More than 40 years of experience

Anton Paar has been a major producer of instruments for sample preparation in trace element analysis for more than four decades.

Thousands of satisfied users

Even when using the best analytical equipment, sample preparation is the key factor to obtain reliable measurement values. Outstanding sample preparation is the only way to obtain precise analysis results.
