



Microwave-assisted UV Digestion (MUV)

Anton Paar offers a microwave-assisted, high-temperature UV digestion method for the accelerated decomposition of dissolved organic carbon (DOC) in liquid samples.

Down With Carbon!

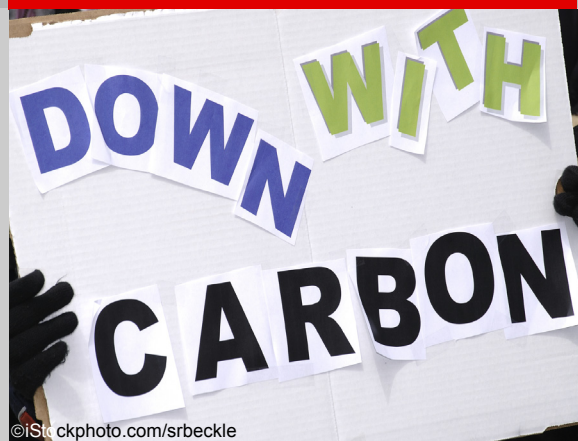
The novel digestion procedure was developed for liquid samples with higher dissolved carbon content such as oil, wastewater, body fluids or beverages.

The disintegration of organic compounds, which can cause interferences in the subsequent trace element analysis, is supported by UV lamps directly immersed into the quartz vessels.

The microwave-induced UV radiation initializes photolytic processes during the digestion. Such radical reactions significantly speed up the decomposition of organic carbon, require only low amount of reagents, thus ensure low blank values with no dilution needed.

MUV in Multiwave PRO - User Benefits

- **Methods:** already pre-installed library
- **Safety:** sophisticated sensors for reaction control
- **Speed:** 1500 W unpulsed microwave power, patented cooling system
- **GLP compliance:** full documentation of temperature, pressure and power data
- **High capacity:** significantly higher UV digestion performance than in open systems (up to 300 °C and 80 bar at the same time)
- **Optimal use of UV radiation:** directly generated in the sample solution
- **Easy handling:** no wires, microwave-induced UV
- **No losses:** closed vessel system
- **Modularity:** almost unlimited expandability of Multiwave PRO with several rotor- and vessel types for other applications, such as extraction, oxygen combustion



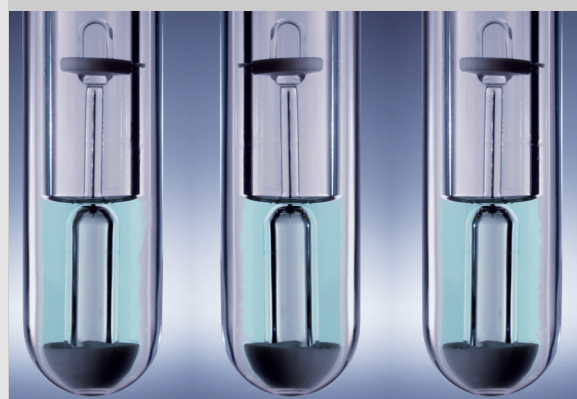
Good to know

Recommended configuration:

- Multiwave PRO + Rotor 8NXQ80 + UV Lamps

Other Anton Paar instruments relevant for the application

- Multiwave PRO + Rotor 8NXF100
- High Pressure Asher HPA-S



Do you have any questions?

Contact Anton Paar
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