

SPONSOR RELEASE

ETHOS™ X

Microwave Extraction of PFAS



EFFICIENT SAMPLE PREPARATION

Per- and polyfluoroalkyl substances (PFAS) are persistent contaminants found in soil, water, food, and air, requiring precise monitoring methods. Microwave-Assisted Extraction (MAE), widely used in sample preparation for organic pollutant analysis, now extends its capabilities to PFAS. The ETHOS X for PFAS analysis is specifically designed to deliver the highest throughput, processing up to 44 samples per batch. This ensures an efficient workflow and the highest productivity available on the market.



PFAS-FREE DISPOSABLE VESSELS
EPA 1633 COMPLIANT
NO CLEANING REQUIRED
HIGH THROUGHPUT
FASTER SAMPLE PREPARATION

MAE Features and Benefits for PFAS Analysis

HIGH THROUGHPUT

The XTR-44 Extraction Rotor accommodates up to 44 samples per batch, simplifying workflows with commercially available polypropylene centrifuge tubes in various volumes, such as 50 mL. By keeping samples in the same tube throughout the process, this approach minimizes contamination. Additionally, the dedicated microwave configuration meets the requirements of EPA Method 1633, while providing a 70% reduction in sample extraction time.

DESIGNED FOR PFAS-FREE PROCESSING

The rotor design, specifically developed for PFAS, ensures that all vessel components in contact with samples are PFAS-free. Using disposable vessels eliminates the need for cleaning and prevents carry-over between runs. This approach significantly reduces contamination risks and streamlines the sample preparation process, while providing excellent recoveries vs. shaker table extractions.

CONSISTENT PROCESS CONTROL

Advanced sensors in the ETHOS X system deliver precise temperature control throughout the extraction process. The easyTEMP sensors and easyCONTROL software ensure uniform conditions across all positions, guaranteeing consistent and reproducible results. The intuitive software of the ETHOS X provides effortless user experience for routine PFAS sample preparation.





MILESTONE
HELPING
CHEMISTS



ETHOS X



*Chlorinated pesticides Semivolatile organics
PAHs PCBs Chlorinated herbicides (phenoxyacid
herbicides) Phenols Organophosphorus pesticides
and chlorinated herbicides Dioxins and furans
Petroleum Hydrocarbons*



ELEVATED SAMPLE THROUGHPUT

DISPOSABLE VIALS

MINIMUM SOLVENT USAGE

SUITABLE FOR US EPA METHOD
3546 AND ASTM METHOD
D5765-05

ADVANCED MICROWAVE EXTRACTION SYSTEM FOR ENVIRONMENTAL APPLICATIONS

The overall concept of the ETHOS X for environmental applications has been developed to fully comply with the requirements of US EPA and ASTM methods.

This system has been developed by studying the working routine of several thousand contract laboratories around the world performing solvent extraction, with the aim of helping them, by offering an integrated solution able to render their activity easier, faster and safer.

A completely new rotor has been specifically developed by Milestone to fully accomplish the US EPA method 3546 requirements. This new rotor consists of a 24-position carousel, which holds large pressure vessels made of an innovative and unique inert polymer material. At the core of the vessel there is a disposable and inexpensive 100 mL glass vial. A self-regulating pressure cover assures safe operations of the system. Temperature and pressure are monitored and controlled in all vessels by non-contact sensors.

With an installed power of 1900 Watt, the ETHOS X is the most powerful microwave platform system available for extraction.

VIDEO

WEBSITE

Is your Laboratory following US EPA 3546?
Learn more at: www.milestonesrl.com/environmental



MICROWAVE EXTRACTION

DIGESTION CLEAN CHEMISTRY MERCURY ASHING SYNTHESIS

milestonesrl.com