

#### RELEASE

# ETHOS™ X Microwave – Gain Productivity in Fat Determination on any Matrix



Fat determination in food and feed matrices is a routine analysis for several testing and food processor labs. Nowadays, the process still relies on outdated and matrix-dependent methods which use obsolete and time-consuming technologies.

The ETHOS X offers a new approach to gravimetric fat determination, moving toward a more modern, greener and more efficient approach to total fat, Fatty Acid Methyl Ester (FAME) and free fat determinations in food and feed matrices.

The ETHOS X applies the well-known selectivity of microwave heating and the advantages of closed vessel technology to fat determination. Its configuration and methods have been specifically built to address lab requirements in terms of throughput, ease of use and universal method approach.

In the ETHOS X hydrolysis and extraction are done in a single step and in less time, ensuring higher productivity and better workflow.

#### Applicable to any matrix

The ETHOS X is not matrix-dependent, so it uses a single method and setup for virtually any food and feed sample. This approach leads also to a lighter accreditation procedure, as it is carried out on several samples using a single technique.

#### **Improved Turnaround Time & Productivity**

The ETHOS X processes 15 samples simultaneously, and as many as 45 samples in a single working day, using one rotor and 75 samples with two rotors. Its specific method combines the hydrolysis and extraction into a single step, thus having a direct impact on the lab's turnaround time and throughput.

#### Lower cost per sample

The ETHOS X uses closed vessels technology to increase the temperature and improve extraction efficiency, reducing the reagents volume too. The unique setup offers a reagent and waste reduction of up to 60%. In combination with the higher productivity and compelling initial investment, it provides a lower cost per sample.

#### **Complete fat determination**

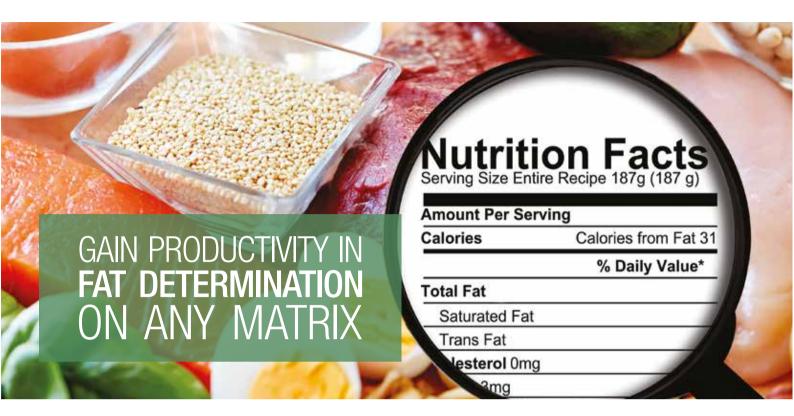
The flexibility of the ETHOS X configuration and its dedicated procedures enables to perform FAME and free fat determinations of food samples, performing the complete fatty acids profile within a single platform.

#### Safe and compact

The ETHOS X setup allows to carry out all the steps within a single platform while improving productivity, it is not installed in the fume hood and saves over 50% of the lab space. Its dedicated exhaust system combined with up-to-date features, ensures the highest operator safety level throughout the entire process.

#### Find out more at milestonesrl.com





## ETHOS™ X

Microwave Fat Determination in Food and Feed

The ETHOS X system matches modern lab requirements offering an efficient approach to total fat determination by gravimetric analysis. Applicable to virtually any food and feed sample, this universal method combines the acid hydrolysis & solvent extraction into a single step, enhancing the overall process and improving the lab workflow.



### ONE METHOD FITS ALL A single platform and

A single platform and method for any samples



### SIMULTANOUS HYDROLYSIS AND EXTRACTION

Fats are hydrolyzed and extracted within a single step



### LOWER REAGENTS CONSUMPTION

Both acid and solvent volumes are reduced by 2/3



Up to 45 samples/day with one system



VIDEO

Watch Videos, Download Brochures & Application Notes at www.milestonesrl.com/fatdetermination

EXTRACTION DIGESTION MERCURY CLEAN CHEMISTRY ASHING SYNTHESIS milestonesrl.com