



**MILESTONE**  
H E L P I N G  
C H E M I S T S



# GROWING YOUR **CANNABIS** TESTING CAPABILITIES



Sample Preparation Solutions for Elemental Analysis



# THE BEST ANALYSIS STARTS WITH THE BEST DIGESTION

With increased state regulations, cannabis growers are required to conduct trace metals testing to ensure a safe and high-quality product. This testing encompasses a wide variety of samples from growers and the processing industry such as soils, fertilizers, plant material, edible products, concentrates and topicals. Obtaining analytical data required to produce quality products starts with the crucial step of sample preparation. Reducing handling steps, eliminating outside contamination and minimizing reagent blank contribution are necessary for good sample preparation. Milestone's closed vessel microwave digestion product line offers you the best solution to obtain superior analytical data.

---

MARKET-LEADING INNOVATION, SAFETY  
AND TECHNOLOGY

---

VARIETY OF SOLUTIONS FOR THE WIDEST  
RANGE OF LABORATORY NEEDS

---

HIGHEST THROUGHPUT AND  
PERFORMANCE ON THE MARKET

---

INSTANT SUPPORT AND REMOTE ACCESS  
THROUGH MILESTONE CONNECT

---





MILESTONE  
ETHOS UP



MILESTONE  
ultraWAVE

## | MILESTONE ETHOS UP

Toxic elements can be easily absorbed by the cannabis plant from soil, water and fertilizer. Therefore, analysis of these matrices is often a fundamental step to ensure product quality. A successful metals analysis requires a complete digestion of the matrix, bringing all target elements in solution and removing possible interferences; this can be achieved by the sample preparation process, a crucial step of the overall analysis process. The ETHOS UP incorporates Milestone's 30 years of experience and knowledge into a unique, powerful and reliable system. Featuring the highest throughput rotors, stainless steel construction and patented vent-and-reseal technology, the ETHOS UP ensures market-leading safety and productivity.

# FLEXIBLE DESIGN FOR ALL YOUR SAMPLES



	ETHOS UP with MAXI 44 Rotor	ETHOS UP with SK-15 Rotor
Typical samples	Soils, water, plant material	Edible, CBD oil, cannabis salve
Sample amount	Up to 0,5 g	Up to 1 g
Working temperature	Up to 200°C	Up to 220°C
Reagent	HNO <sub>3</sub> , HCl	HNO <sub>3</sub> , HCl
Productivity	High	Medium

The ETHOS UP equipped with our MAXI-44 (High Throughput Rotor) and/or with SK-15 (High-Pressure Rotor) enables complete digestion of a large wide variety of all cannabis related products from the plant material to edibles and concentrates.



*ETHOS UP with MAXI-44 Rotor*



*ETHOS UP with SK-15 Rotor*

## | MILESTONE ultraWAVE

Cannabis analytical testing labs analyse a broad variety of matrices for which metals determination could be very different; toxic elements in some cases and plant nutrients in others. The growing demand for routine metals and trace metals determination emphasizes the need to ensure high productivity along with high quality data, starting from the sample preparation procedure. Developed and patented by Milestone, the ultraWAVE provides state-of-the-art microwave sample preparation. The ultraWAVE's Single Reaction

Chamber (SRC) utilizes high-performance stainless steel, allowing for higher pressures and temperatures to be reached and any type of acids to be used. Disposable vessels eliminate the need to assemble, disassemble or clean between processing. Just as important, dissimilar samples can be processed simultaneously using any mixture of disposable glass, quartz or TFM vials, thus saving time and money.

**The ultraWAVE is simply the fastest, easiest and most efficient digestion system ever made!**

	ultraWAVE with 15 position rack
Typical samples	Any samples. Soils, fertilizers, edible, CBD oil, cannabis salve, cosmetics
Sample amount	Up to 1 g
Working temperature	Up to 300°C
Reagent	Any reagent
Productivity	Very high

The ultraWAVE ensures full digestion and the highest productivity for any cannabis related samples. All samples are digested simultaneously ensuring superior ease of use and performances.



ultraWAVE



**UNRIVALED  
PRODUCTIVITY  
IN SAMPLE PREPARATION**

# MILESTONE HELPING CHEMISTS

Established in 1988, Milestone is headquartered in Italy and has offices in Germany, Switzerland, the United States, China, Japan and Korea. We operate worldwide through a network of over 100 exclusive distributors, all providing our customers premium application and service support. Milestone's mission is to help chemists by offering them the most advanced instrumentation for sample preparation and direct mercury analysis in the world. Our industry-leading technology, in combination with fast, responsive service and applications support, allows Milestone to support our goal of providing you the highest return on investment possible.

## | ADDITIONAL MILESTONE SOLUTIONS FOR CANNABIS LABS



### **duoPUR/subCLEAN**

Acid Purification System



### **traceCLEAN**

Acid Steam Cleaning System



### **ETHOS X**

Terpenes Extraction

WWW.MILESTONESRL.COM

### **MILESTONE**



H E L P I N G  
C H E M I S T S

UNI EN ISO 9001: 2008  
CERTIFIED

MILESTONE Srl - Via Fatebenefratelli, 1/5 - 24010 Sorisole (BG) - Italy  
Tel: +39 035 573857 - Fax: +39 035 575498  
www.milestonesrl.com - email: analytical@milestonesrl.com

MILESTONE INC. - 25 Controls Drive - Shelton, CT 06484 - USA  
Tel: (203) 925-4240 - Toll-free: (866) 995-5100 - Fax: (203) 925-4241  
www.milestonesci.com - email: mwave@milestonesci.com

MILESTONE GENERAL K.K. - KSP, 3-2-1, Sakado - Takatsu-Ku,  
Kawasaki 213-0012 - Japan - Tel: +81 (0)44 850 3811 - Fax: +81 (0)44 819 3036  
www.milestone-general.com - email: info@milestone-general.com

MLS GmbH - Auenweg 37 D-88299 Leutkirch im Allgau - Germany  
Tel: +49 (0)7561 9818-0 - Fax: +49 (0)7561 9818-12  
www.mls-mikrowellen.de - email: mws@mls-mikrowellen.de