

# UPHO



Ultimate sample homogenizer

Disrupt and process several samples for more accurate results

Versatile, lab-friendly and affordable

## Main Features



 **Versatile**  
All sample types

 **Lab-friendly**

 **High throughput**  
64 / min

 **Small Footprint**  
28 x 53 x 40 (cm)

## Main Features

- High throughput- Up to 64 samples simultaneously
- No cross contamination between operations
- Wide range of interchangeable adapters and cans
- 1 min run cycle
- CE marked
- User-friendly interface - intuitive touchscreen with automatic and user-defined programs
- Bead mill technology
- Easy to operate at cryogenic and room temperature samples
- Easy cleaning procedure
- Long shelf-life



## Technical Features

Interface	Touch screen
Controls	Programmable settings for frequency, running time and pause time between cycles
Custom Programs	Yes (up to 10 programs)
Time Range	Up to 999 seconds
Set cycle time gap	Yes
Homogenization Frequency	20 - 70 Hz
Acceleration	2 seconds to reach maximum speed
Dimensions	WLD: 28 X 53 X 40 cm
Weight	35 Kg (55 lb)
Power Requirement	220-240V~50 Hz, 2.5 A, 375 W
Operating Air Temperature	2 to 48°C (35 to 118°F)
Relative Humidity	30 to 55 %
Maximum Noise	65 dB

Full protection: security lock  
3 types of grinding: dry, wet and cryogenic

For more detailed information please contact,  
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## Homogenization Process

### Laboratory applications:

Sample preparation, grinding, homogenization and material dispersion, DNA, RNA, protein purification and extraction, cell fractionation, organelle isolation

### Market applications

- Pharmaceuticals:  
Drug discovery process, toxicity and dosage

- Molecular biology research

- Food science:  
Determination of preservatives, pesticides, residues, growth hormones, antibiotics

- Forensic/Toxicology:  
Identity confirmation, poisoning/overdose

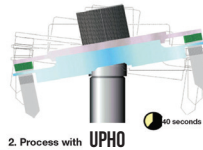
### Mechanical method:

- Most popular and practical
- Minimal training to operate
- Small and compact
- Cost-effective
- Safe

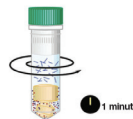
### Cells and lysing buffer



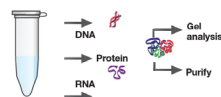
#### 1. Prepare lysis tube



#### 2. Process with UPHO



#### 3. Centrifuge to pellet debris



#### 4. Transfer cleared lysate

## Sample types

Plant tissue: root, stem, leaves, flowers, fruits, seeds

Animal tissue: brain, heart, lungs, stomach, liver, thymus, kidney, intestine, lymph nodes, muscles, bones; skin

Funghi and bacteria: E. Coli, yeast

All types of food

### Adapters and cans

Adapter material:

metal, plastic, PTFE and steel  
Volume: 2, 5, 10, 15, 50 mL

### Beads

Bead spheres material - metal, glass, ceramic and steel

Bead spheres diameter - 0,1 - 15 mm

