

# Automated Media Preparator



## Description

The preparation of agar medium is a routine task in today's laboratories. The typical workflow is to dissolve the components in a flask followed by sterilization in an autoclave. However, this procedure has several disadvantages.

First, the numerous working steps makes media preparation very time-consuming. Second, the sterilization temperature is usually controlled only in one single reference container, with the result that heat exposure may differ from sample to sample. Making things worse, the agar medium within the bottles cannot be stirred during the sterilization process – which otherwise would guarantee that it stays homogeneous. Lastly, it takes very long to cool the medium to dispensing temperatures and hence is exposed to a high temperature for a long time. As a result, the fertility of the agar medium might be impaired.

Automated Media Preparator eliminates all the above disadvantages. It allows for a much shorter process in which medium formulation and sterilization is carried out in one single step. The temperature of the agar medium is precisely monitored and controlled during the entire process. Permanent stirring guarantees homogenous temperature throughout the whole batch and an efficient plate heat exchanger facilitates rapid cooling. All these features prevent the medium from excessive heat exposure and thereby maintain its fertility.

## Features

- MEDIAClave is designed to keep maintenance easy. The absence of any heating element within the sterilization vessel makes the cleaning of the vessel easy.
- The integrated CLEANING procedure automatically sterilizes the vessel, valves and the tubing inside MEDIAClave.

- Hot,sterile coupling water is drained at the process end; dissolvingand removing unwanted agar residues in the system effectively.
- This allows a complete decontamination of all vulnerable partsof the instrument and thus ensures the best possible environmentfor sterile media preparation.
- An automaticindication of the next service to be due preventsunnecessary downtime, thus maximising the productivity of thewhole media kitchen.

## Applications

### Standard Agar Medium

MEDIACLAVE used for the preparation and sterilization of numerous types of culture media

### Charcoal Agar

Preparing Charcoal Agar Medium using MEDIACLAVE

### Fly Food Preparation

An optimized system for the preparation of Drosophila melanogaster (fly) food

## Technical Data

### MEDIACLAVE Capacity 10 MEDIACLAVE 30

- Stainless steel cuvette 1 – 10 L 3 – 30 L
- Autoclave cuvette (Ø, H) 254 mm, 203 mm –

### Temperature range

- Sterilization 30°C – 122°C
- Dispensing 20°C – 80°C
- Water bath 30°C – 80°C
- Max. temperature deviation +1.0°C/-0.2°C

### Stirrer speed

- Selectable 50 – 200 rpm, reversing direction

### Utilities

- Heating Capacity Max.3 kW Max. 9 kW
- Interfaces 2 x RS232, Ethernet, USB port, AUX contact, footswitch, ext. pinch valve contact, footswitch
- Cooling water connections ¾" thread ¾" thread

### Electricity supply

- All MEDIACLAVE 10 instruments 200 – 240 V 50/60 Hz, 16 A –
- MEDIACLAVE 30, US/JP (136 050) – 200-208 V 3~/PE, 50/60 Hz, 30 A
- MEDIACLAVE 30, EU (136 055) – 400 V 3~/N/PE, 50/60 Hz, 16A

### Dimensions and weight

- Basic Device (H x W x D) 480 mm x 550 mm x 640 mm 1040 mm x 550 mm x 640 mm
- Weight 57 kg 85 kg