Thermoline 1315M Furnace

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Tool Type: Box Furnace
Location: Microfluidics Lab
Description: Small High-Temperature (1000 C) Box Furnace
Manufacturer: Thermoline

About

From the manufacturer: The furnace chamber is heated by a single three section resistant heater which is embedded in a refractory material. The chamber is insulated with a ceramic fiber insulation. The temperature is controlled by an electronic control. The temperature is measured by a thermocouple and is registered on a digital display. For safety, door switches are incorporated to remove power from the heating elements when the door is opened. The furnace is supported by the control section which also houses the electrical connections.

Safety Concerns

- High Temperature
- No combustibles or hazardous materials
- Thermally insulating gloves must be worn when working with hot items.
- Do not use to heat food.
- Never heat a sealed container.
- Do not operate the furnace if it is damaged, or is not working properly. Please place a note on the oven to alert other users, and notify laboratory staff of the problem.
- **Double containment is required for heating containers of liquid to prevent leaked material from contaminating the oven. This is especially true when heating PDMS molds.**

Operating Procedures

1) Plug in the furnace and power on.
2) Set the desired temperature using the up/down arrow buttons on the controller.
3) Locate at pair of thermally insulated gloves, usually near the convention ovens.
4) Once the desired temperature is reached, place your item(s) in the furnace while wearing insulated gloves. Remember, all liquids must be double contained so that if they spill, the oven remains clean.
5) If performing multiple steps, adjust the temperature when needed.
6) When finished, power off and unplug the furnace. Close the door and leave a note if the furnace is still hot when you leave.

Detailed Specifications

- Chamber dimensions: 4” W x 3.75” H x 4.5” D (10.2 x 9.5 x 11.4 cm)
- Temperature ranges: 100C-982C for continuous use, or 982C-1100C for intermittent use. Continuous use is operating the furnace for more than three straight hours, and intermittent use is operating the furnace for less than three hours.

Reference Documentation

Operations and Repair Manual

Manual
