

SOP: Muffle (Box) Furnace Quick Start

Thermolyne FD1545M (Thermo Fisher, USA) muffle furnace for atmospheric oxidation of samples up to 1000°C. Note heating/cooling rate is limited to 10°C/min or slower (to avoid cracking the elements), so a typical 800°C, 1 h run will require 3.6 h of instrument time.

1. Press the **PAGE** Button 3 times until the display says Prog List
2. Press the **SCROLL** button repeatedly to scroll through the program settings and use the UP and DOWN arrows to change the settings as desired.
 NOTE: DO NOT EXCEED A RAMP RATE OF 10 °C/MIN.

Below is a sample program for heating to 800 °C for 1 hour with a 10 °C/min ramp rate:

Hb: Off	seg.n: 1	type: dwell	seg.n: 4
Hb U: 0	type: rmP.r	dur: 60	type: end
rmP U: min	tgt: 800	seg.n: 3	end.t: S OP
dwl U: min	rate: 10.0	type: step	
cyc.n: 1	seg.n: 2	tgt: 25	

3. When you are finished programming, load your samples and hit the RUN/HOLD button to start the program. Pressing the RUN/HOLD button again will put the program on hold and pressing and holding the RUN /HOLD button will end the program.
4. Once the furnace has cooled to < 100 °C you may remove your samples.

