

Ceramic

(40% SiO₂, 12% Na₂O, 11% B, 10% Co₃O₄, 8% Al₂O₃, 4% TiO₂)

Sample Category: Inorganic Compounds

Sample Requirements

Sample Weight: 0.2g
 Reagents: 5mL Conc. HNO₃, 2mL Conc. HF
 Vessels: 35mL glass, quartz, and Teflon™ lined

Microwave Heating Program

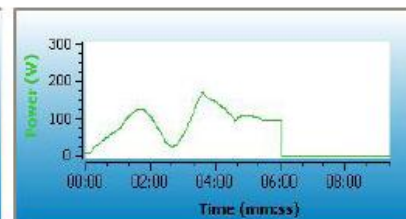
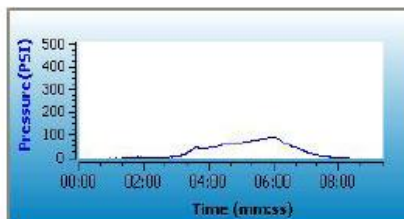
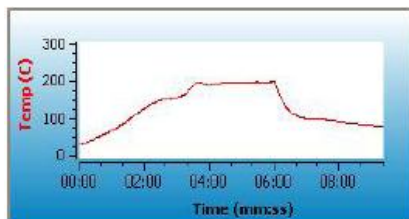
Control Style: Ramp To Temperature
 Pressure Mode: Inorganic

Recommended Equipment



Discover SP-D

Stage	Temp (°C)	Ramp Time	Hold Time	Pressure (psi)	Power (W)	Stirring
1	200	4:00	2:00	400	300	Med



Notes:

1. If using a vial other than the recommended choice, adjust sample size and pressure limit to values appropriate for the vessel chosen.

Safety Precautions for Working with Samples Requiring HF

1. The instrument must be placed in a hood and the SP-D HF Scrubber must be installed.
2. Sample mass must be ≤ 0.3 grams for organic samples and ≤ 0.5 grams for inorganic samples.
3. The volume of HF required for total digestion may vary depending upon the sample matrix. Do not exceed 3 mL of total HF volume in the 35 mL Teflon lined vials.
4. It is recommended that Personal Protective Equipment (PPE) for handling HF include chemical splash goggles with a safety shield, lab coat with chemical splash apron, and heavy weight nitrile or rubber gloves.

General Precautions:

This procedure is a reference for sample digestion using a CEM System and may need to be modified or changed to obtain the required results on your sample

