



Procedure

Weigh 0.5 g of the sample into the digestion vessel. Add 9 mL of HNO₃ and 3 mL HF. Gently swirl the mixture and wait approximately 15 minutes before capping the vessel.

Notes

This procedure uses hydrofluoric acid. If it is necessary to complex the residual hydrofluoric acid or redissolve insoluble fluorides formed, an additional complexation step with boric acid should be used. This procedure can be found in the method note entitled “Boric Acid HF Neutralization”.

Recommended Equipment

Discover SP-D 80

Recommended Vessels

80 mL Quartz with Teflon liner

Reagents

HNO₃
HF

Max Sample Weight

0.5 g

Sample Type / Vent Program

Inorganic

Control Type

Ramp to Temperature

Heating Program

Stage	Temp (°C)	*Ramp (mm:ss)	Hold (mm:ss)	Pressure (psi)	* Power (W)	Stirring
1	180	5:30	9:30	400	300	Med

* Ramp times and power may vary depending on the type and number of vessels.

Results

Sample was clear, colorless, and particle free upon dilution to 50 mL.

General Precaution

- This procedure is a reference point for sample digestion using a CEM system and may need to be modified or changed to obtain the required results on your sample.
- If using a vessel other than the recommended choice, adjust sample size and pressure limit to values appropriate for the vessel chosen.
- If using HF, follow restrictions listed in HF Addendum