

Procedure

Weigh 0.5 g of the sample into the digestion vessel. Add 5 mL HNO₃, 3 mL HCl, 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 One Touch Method note entitled "Boric Acid HF Neutralization".

The addition of Conc. HCl (0-4 mL) is appropriate for the stabilization of Ag, Ba and Sb, and high concentrations of Fe and Al in solution. The amount of HCl will vary depending on the matrix and the concentration of the analytes. The addition of HCl may, however, limit the techniques or increase the difficulties of analysis.

Recommended Equipment	Recommended Vessels	Reagents
Discover SP-D 80	80 mL Quartz with Teflon liner	HNO3 HCI HF

Max Sample Weight Sa		Sample Ty	Sample Type / Vent Program		Control Type			
0.5 g		Inorganic	Inorganic		Ramp to Temperature			
Heating Program								
Stage	Temp (°C)	*Ramp (mm:ss)	Hold (mm:ss)	Pressure (psi)	* Power (W)	Stirring		
		· ····· (· ······· ·)		(F)		9		

3:00

400

300

Med

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

5:00

Results

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

General Precaution

a) 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.

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

c) If using HF, follow restrictions listed in HF Addendum

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