Microwave Digestion of Kelp

Procedure

Weigh 0.5 g of the sample into the digestion vessel. Add 9 mL HNO_3 and 1 mL HCl. Gently swirl the mixture and wait approximately 15 minutes before capping the vessel.

Notes

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

Discover SP-D 80 mL

Recommended Vessels

Quartz

Reagents

HNO_3

HCl

Max Sample Weight

0.5 g

Sample Type / Vent Program

Organic

Control Type

Ramp to Temperature

Heating Program

Stage	Temp (°C)	Ramp (mm:ss)	Hold (mm:ss)	Pressure (psi)	Power (W)	Stirring
1	200	5:00	5:00	400	300	Med

Results

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

General Precautions

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.

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