Discover® SP-D 80™

Method Note

Microwave Digestion of Char - Sulfuric Acid

Procedure

Add 5 mL H_2SO_4 into the vessel that contains the sample.

Notes

This method is for the pretreatment of large sample sizes or difficult organic samples that are resistant to oxidation. After the char is complete, the vessel is opened and a normal oxidation with HNO_3 can be run, usually at around 200C.

Recommended Equipment

Discover SP-D 80

Recommended Vessels

80 mL Quartz

Reagents

H_2SO_4

Max Sample Weight

Varies by sample

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	260	10:00	10:00	400	300	Med

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

Results

Sample will appear black and viscous after the char step.

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.