Technology
Digestion of Graphite

Summary Graphite is digested in a Berghof stainless steel high pressure digestion system.

Method

Equipment

	Type	Manufacturer
	DAB-2	Berghof Products + Instruments GmbH
	Vessel volume 50 mL	Berghof Products + Instruments GmbH

Reagents	Acid		Volume
	HNO_3	(65%)	5.0 mL
	H_2SO_4	(95%)	5.0 mL

Procedure*

Weigh 500 mg of the sample into the digestion vessel. Add 5.0 mL of HNO_3 and 5.0 mL of H_2SO_4. Allow the mixture to react for a period of at least 5 minutes. Close the vessel and heat with the following program.

Temperature Program	Step	T [°C]	Time [h]**
	1	250	48-72

Note: To avoid foaming and splashing wait until the vessels have cooled to room temperature. Carefully open the digestion vessel in a fume hood wearing hand, eye and body protection since a large amount of gas will be produced during the digestion process.

Results Clear solution.

Note: This application serves only as a guide line and may need to be optimized for your sample.

*For other high pressure digestion vessels the maximum sample mass and volume of the acid mixture required can easily be calculated from the proportion of the inner vessel volumes.

**This time includes the heating-up period