Application Note - Digestion of Protein Powder

Introduction:

This study evaluated the effectiveness of the *Mini***WAVE** microwave digestion system to digest protein powder.

Supplies and Reagents:

1) *Mini***WAVE** Model*
2) Quartz Vessels, 75 ml*
3) Teflon® Caps and Safety Pressure Release Caps (calibrated at 435psi)*
4) PlasmaPURE HNO3 (70%)*

* Manufactured by **SCP SCIENCE**

Sample Preparation Procedure:

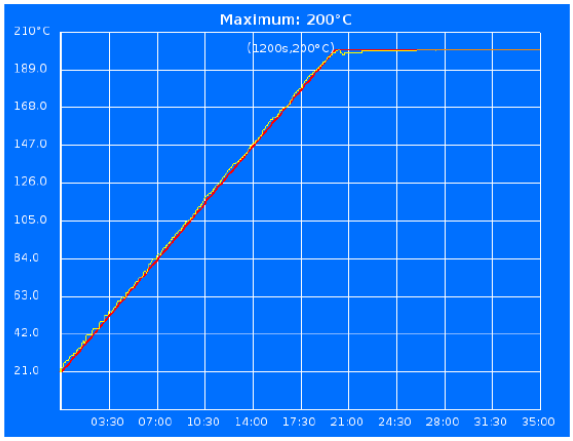
The samples were weighed on a 4 place analytical balance directly in the vessels. After adding 10 ml of HNO3, the samples were allowed to sit at room temperature for 5-10 minutes. The vessels were placed in the rack, capped and digested following the heating profile below. After cooling to room temperature, the rack was vented carefully in a fumehood. At the end of the digestion, the solutions were a clear-green solution, no target values we provided for analysis.

Heating Program:

STAGE	RAMP TIME (MINUTES)	TEMPERATURE (°C)	HOLD TIME (MINUTES)
1	20	200	15

*Mini***WAVE Report:**

User: Root, **User Level:** Services,
Date: Tue 29 Apr 2014, **Module:** 1,
Methode: Xymogen (Methode Time=00:35:00 (2100s).),
Vessel Type: Quartz, **Rack Name:** MiniRack,
Status: Successfully Digested.



Conclusion:

The *Mini***WAVE** is an effective system to digest these types of sample for metal analysis.

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MiniWAVE
Microwave Digestion Made Easy

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