

APPLICATION NOTE MW-101

CLOSED VESSEL DIGESTION

Sample	Dried Beef
Type of Vessel	HP/VHP Vessels and TFM Liners
Number of Vessels	Up to 10
Reagents	3 mL HNO ₃ , 3 HCl
Sample Weight¹:	0.2 grams dried beef powder

Procedure

- Place 0.2 grams of the sample into the liner of each vessel
- Add small amount of water to wet the sample
- Add 3 ml of concentrated HNO₃, 3 mL of HCl to each vessel inside the fume hood and allow the sample to outgas before sealing the vessels.
- Pre-heat on the thermal plate at about 50°C for 10 min.
- Load the vessel carousel into the microwave digestion oven and run digestion program as follows:

Digestion Program

Step	Time/s	Starting Temp/C°	Ending Temp/C°
1	600	34	130
2	240	130	160
3	300	160	160
4	300	160	190
5	600	190	190

- After the digestion, the solution should be clear in yellowish brown color.
- Add 1.5 ml of H₂O₂ to each vessel and shake it well until it become colorless

NOTE: This procedure is a reference point for sample digestion using the Aurora Microwave digestion system and may need to be modified or changed to obtain the required results on your subject.

