

# Mars 6TM Method Note

# Microwave Digestion of Broccoli

### **Procedure**

Weigh 0.5 g (dry weight) of the sample into the digestion vessel. Add 10 mL of HNO<sub>3</sub>. Gently swirl the mixture and wait approximately 15 minutes before closing the vessel.

#### **Notes**

**Recommended Equipment** 

**Recommended Vessels** 

Reagents

MARS 6 MARS 6 iWave EasyPrep Plus MARSXpress MARSXpress Plus HNO<sub>3</sub>

| Max Sample Weight  | Sample Type | Control Type        | Method Type |
|--------------------|-------------|---------------------|-------------|
| 0.5 g (Dry Weight) | Organic     | Ramp to Temperature | One Touch   |

| Heating Progra | am        |               |              |                |             |          |
|----------------|-----------|---------------|--------------|----------------|-------------|----------|
| Stage          | Temp (°C) | *Ramp (mm:ss) | Hold (mm:ss) | Pressure (psi) | * Power (W) | Stirring |
| 1              | 200       | 15:00         | 15:00        | 800            | 900-1050    | Off      |

<sup>\*</sup> Ramp times and power may vary depending on the type and number of vessels.

## Results

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

#### **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.
- c) The control / reference vessel must contain the largest and most reactive sample.
- d) Manual venting of CEM vessels should be performed when wearing hand/eye/body protection and when the vessel contents are at or below room temperature to avoid the potential for chemical burns. Always point the vent hole away from the operator.
- e) If programming as One Touch, the ramp time and power will be automatically determined based on the number and type of vessels detected.