MARS 6™
# Method Note

# Microwave Digestion of Aluminum Alloy

## Procedure

Weigh 0.25 g of the sample into the digestion vessel. Add 5 mL of $H_2O$ and 5 mL of HCl .Gently swirl the mixture before closing the vessel.

## Notes

Add $H_2O$ before HCl.

Add HCl slowly, and allow vessels to stand in the fume hood until initial reaction subsides.

| Recommended Equipment | Recommended Vessels | Reagents |
|---|---|---|
| MARS 6<br>MARS 6 iWave | EasyPrep<br>EasyPrep Plus<br>MARSXpress<br>MARSXpress Plus | HCl<br>$H_2O$ |

| Max Sample Weight | Sample Type | Control Type | Method Type |
|---|---|---|---|
| 0.25 g | Organic | Ramp to Temperature | One Touch |

## Heating Program

| Stage | Temp (°C) | *Ramp (mm:ss) | Hold (mm:ss) | Pressure (psi) | * Power (W) | Stirring |
|---|---|---|---|---|---|---|
| 1 | 190 | 10:00 | 15:00 | 800 | 900-1050 | Off |

* 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.