

Inconel Alloy 718 UNS N07718

DIGESTION OF INCONEL ALLOY 718 USING COLDBLOCK™ DIGESTION TECHNOLOGY

Author: Lorie-Anne Doig

Introduction

This application note will focus on the digestion of Inconel Nickel Alloy 718 using ColdBlock™ Digestion CB12L Technology.

Method

Triplicate samples of Nickel alloy 718 chips were digested using the following method:

- 0.5g sample was weighed and placed into a ColdBlock™ Digestion vessel.
- 20mL Aqua Regia was added (3:1 HCl:HNO₃)
- Sample was digested at 50 % power for 15 minutes; chiller temperature was set to -5°C.
- After digestion, 1.5mL (30%) H₂O₂ was added
- Sample was allowed to cool then was normalized to 50mL using 2% HNO₃.

Instrument

ColdBlock™ Digestion CB12L Technology.

General

This procedure is specific for the sample digested and may need modification for different samples to achieve the desired result.