

NIST-333a – Molybdenum sulfide Concentrate

DIGESTION OF CRM NIST-333a, MOLYBDENUM SULFIDE CONCENTRATE USING COLDBLOCK™ DIGESTION TECHNOLOGY

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Introduction

This application note will focus on the digestion of SRM NIST 333a using ColdBlock™ Digestion Technology.

Method

Six samples of NIST-333a were digested using the following method:

- Chiller temperature was set to -5°C.
- 0.2g sample was weighed and placed into a ColdBlock™ Digestion vessel.
- 4mL Nitric acid (HNO₃) & 2mL Sulfuric acid (H₂SO₄) was added
- Samples were digested at 100% power for 10 minutes.
- Samples were cooled and diluted to 25mL using 1% HNO₃.

Instrument

ColdBlock™ Digestion CB6L Technology.

General

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

Wang, Y., Brindle, I., Baker, L., Helmecci, E. (2016). Rapid high-performance sample digestion of base metal ores using high-intensity infrared radiation with determination by nitrogen-based microwave plasma optical spectrometry. *Analytics Chemistry Research*, Volume 7, March 2016, Pages 17-22. <https://doi.org/10.1016/j.ancr.2016.02.002>