AS 3641.2—1999
Reconfirmed 2016

Australian Standard™

Recommended practice for atomic emission spectrometric analysis

Part 2: Inductively coupled plasma excitation

This Australian Standard was prepared by Committee CH/16, Spectroscopy. It was approved on behalf of the Council of Standards Australia on 29 October 1999 and published on 5 December 1999.

The following interests are represented on Committee CH/16:

Australian Chamber of Commerce and Industry

CSIRO Energy Technology

CSIRO Manufacturing Science and Technology

Department of Defence (Australia)

Department of Natural Resources, Qld

National Association of Testing Authorities, Australia

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This Standard was issued in draft form for comment as DR 99005.

STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 3641.2—1999
Recommended practice for atomic emission spectrometric analysis
Part 2: Inductively coupled plasma excitation

RECONFIRMATION NOTICE

Technical Committee CH-016 has reviewed the content of this publication and, in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Australian Institute of Physics
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National Association of Testing Authorities Australia
National Measurement Institute

NOTES

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PREFACE

This Standard was prepared by the Standards Australia Committee CH/16, Spectroscopy to supersede AS 3641.2—1990.

The objective of this Standard is to describe recommended procedures for the setting up and operation of inductively coupled plasma (ICP) instruments. The recommendations in this Standard are intended to apply to Australian Standard methods for ICP analysis.

This Standard is part of a series as follows:

AS
3641 Recommended practice for atomic emission spectrometric analysis
3641.1 Part 1: Principles and techniques
3641.2 Part 2: Inductively coupled plasma excitation

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out recommendations for instrumentation and operating procedures in the application of the inductively coupled plasma (ICP) excitation to chemical analysis by atomic emission spectrometry.

NOTE: This Standard is intended to be read in conjunction with AS 3641.1 and the instrument manufacturer's recommendations.

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
2162 Verification and use of volumetric apparatus
2162.1 Part 1: General—Volumetric glassware

2243 Safety in laboratories
2243.5 Part 5: Non-ionizing radiations

2772 Radiofrequency radiation
2772.2 Part 2: Principles and methods of measurement—300 kHz to 100 GHz

2850 Chemical analysis—Interlaboratory test programs—For determining precision of analytical method(s)—Guide to the planning and conduct

2883 Analysis of metals—Procedures for the setting up, calibration and standardization of atomic emission spectrometers using arc/spark discharge

2929 Test methods—Guide to the format, style and content

3641 Recommended practice for atomic emission spectrometric analysis
3641.1 Part 1: Principles and techniques

AS/NZS
2243 Safety in laboratories
2243.2 Part 2: Chemical aspects

ASTM
E 135 Terminology relating to analytical chemistry for metals, ores and related materials

ISO
5701 Guide to data analysis and quality control using cusum techniques (series)

1.3 DEFINITIONS For the purpose of this Standard, the definitions in AS 2883 and ASTM E 135 apply.