

Australian Standard™

Coal and coke—Analysis and testing

**Part 21.1.1: Higher rank coal and coke—
Relative density—Analysis
sample/density bottle method**

This Australian Standard was prepared by Committee MN-001, Coal and Coke. It was approved on behalf of the Council of Standards Australia on 31 October 2002 and published on 13 November 2002.

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Australasian Institute of Mining and Metallurgy
Australian Coal Association
Australian Coal Preparation Society
Australian Institute of Energy
Coalfield Geology Council of New South Wales
CSIRO, Energy Technology
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PREFACE

This Standard was prepared by the Standards Australia Subcommittee on Coal Evaluation, under the supervision of the Committee MN-001, Coal and Coke, as a revision of AS 1038.21.1.1—1994, *Coal and coke—Analysis and testing, Part 21.1.1: Higher rank coal and coke—Relative density—Analysis sample/density bottle method*.

The objective of this Standard is to provide those responsible for testing coal and coke with a standardized method for measuring the relative density using a density bottle, so that disputes can be minimized.

This revision confirms the method for the determination of the relative density of higher rank coal and coke by the analysis sample/density bottle method.

Editorial changes have been made to bring the Standard into line with current style.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is for information and guidance only.

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STANDARDS AUSTRALIA

Australian Standard
Coal and coke—Analysis and testing**Part 21.1.1: Higher rank coal and coke—Relative density—Analysis
sample/density bottle method****1 SCOPE**

This Standard sets out a method for the determination of the relative density of higher rank coal and coke by a relative density bottle.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

1038	Coal and coke—Analysis and testing
1038.3	Part 3: Proximate analysis of higher rank coal
1038.4	Part 4: Coke—Proximate analysis
1038.16	Part 16: Assessment and reporting of results
2243	Safety in laboratories (series)
2378	Density bottles
2418	Coal and coke—Glossary of terms
2508	Safe storage and handling information cards
2706	Numerical values—Rounding and interpretation of limiting values
4264	Coal and coke—Sampling
4264.1	Part 1: Higher rank coal—Sampling procedures
4264.2	Part 2: Coke—Sampling procedures

3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2418 apply.

4 PRINCIPLE

The mass of water displaced by a known mass of air-dry coal or coke is determined in a density bottle.

5 SAFETY

For information on laboratory safety, reference should be made to the relevant parts of AS 2243 and AS 2508.

6 REAGENTS**6.1 Distilled water**

Distilled water or water of equivalent purity.