

Australian Standard®

AS 1774.9—2007

Refractories and refractory materials—Physical test methods**Method 9: Determination of resistance to the disintegrating effect of carbon monoxide**

PREFACE

This Standard was prepared by the Standards Australia Committee MN-007, Refractories and Refractory Materials, to supersede AS 1774.9—2000, *Refractories and refractory materials—Physical test methods, Method 9: Determination of resistance to the disintegrating effect of carbon monoxide*

The objective of this Standard is to provide the refractories industry with an internationally accepted method for determining the resistance to the disintegrating effect of carbon monoxide on refractory products.

This Standard is identical to and has been reproduced from ISO 12676:2000, *Refractory products—Determination of resistance to carbon monoxide*.

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (c) Replace Item c) in Clause 10 with ‘reference to this Australian Standard, i.e. AS 1774.9;’.
- (d) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
5022 Shaped refractory products—Sampling and acceptance testing	2497 Procedures for acceptance testing of refractory products 2497.1 Part 1: Batch procedure
8656 Refractory products—Sampling of raw materials and unshaped products	2497 Procedures for acceptance testing of refractory products
8656-1 Part 1: Sampling scheme	2497.1 Part 1: Batch procedure

NOTES

1 Scope

This International Standard specifies a method for determining the comparative resistance of refractory materials to carbon monoxide disintegration.

The test is intended to be more severe than conditions encountered in service in order to enable probable behaviour of refractory materials to be assessed in a relatively short time.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 5022:1979, *Shaped refractory products — Sampling and acceptance testing*.

ISO 8656-1:1988, *Refractory products — Sampling of raw materials and unshaped products — Part 1: Sampling scheme*.

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1

carbon monoxide disintegration

breakdown of a refractory product caused by the deposition of carbon resulting from the dissociation of carbon monoxide

3.2

carbon monoxide resistance

resistance of a refractory product to carbon monoxide disintegration when exposed to carbon monoxide under specified conditions of atmosphere and temperature

4 Principle

Test pieces are exposed to a specified carbon monoxide atmosphere at a controlled temperature for a specified time.

NOTE Carbon monoxide is toxic and suitable safety precautions should be observed when carrying out this test e.g. monitoring the atmosphere around the apparatus to detect leakage of carbon monoxide.