
**Classification of dense shaped
refractory products —**

**Part 4:
Special products**

Classification des produits réfractaires façonnés denses —

Partie 4: Produits spéciaux



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Contents

	Page
Foreword	iv
1 Scope	1
2 Principle	1
3 Classification	1
3.1 Type of product	1
3.2 Group	2
3.3 Nature of raw materials	8
3.4 State of raw materials	9
3.5 Nature of the bond	9
3.6 Post-treatment	9
4 Other refractory products	10
5 Designation of a special product	10
Bibliography	11

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information.

The committee responsible for this document is ISO/TC 33, *Refractories*.

This second edition cancels and replaces the first edition (ISO 10081-4:2007), of which it constitutes a minor revision. Changes have been made to [Tables 7](#) and [8](#) and the bibliography has been updated.

ISO 10081 consists of the following parts, under the general title *Classification of dense shaped refractory products*:

- *Part 1: Alumina-silica*
- *Part 2: Basic products containing less than 7 % residual carbon*
- *Part 3: Basic products containing from 7 % to 50 % residual carbon*
- *Part 4: Special products*

Classification of dense shaped refractory products —

Part 4: Special products

1 Scope

This part of ISO 10081 specifies the classification and designation of dense shaped refractory products of special composition including

- a) oxide products,
- b) oxide and non-oxide products,
- c) non-oxide silicon carbide or carbon-based products, and
- d) further special products which are only designated but not classified, for example, non-oxide products, such as boride, nitride or further combinations of the series listed above.

2 Principle

Dense shaped special products shall be classified according to the following six criteria:

- a) the type of product;
- b) the group determined by the content of its main chemical component(s);
- c) the principal raw material(s);
- d) the state of the raw materials;
- e) the nature of the bond;
- f) any post-treatment.

3 Classification

3.1 Type of product

The following types of dense shaped refractory special products shall be classified by chemical analysis as shown in [3.2](#).

- a) alumina-chromia (ACr);
- b) chromia (Cr);
- c) alumina-chromia-zirconia (ACrZ);
- d) alumina-chromia-zirconia-silica (ACrZS);
- e) zirconia-silica (ZS);
- f) alumina-zirconia-silica (AZS);
- g) alumina-carbon (AC);