

**Tulekindlad isolatsioonitooted. Osa 1:
Keraamilisest kiust toodete terminoloogia**

Insulating refractory products - Terminology,
classification and methods of test for high temperature
insulation wool products

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1094-1:2008 sisaldab Euroopa standardi EN 1094-1:2008 ingliskeelset teksti.

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English Version

Insulating refractory products - Part 1: Terminology,
classification and methods of test for high temperature insulation
wool products

Produits réfractaires isolants - Partie 1 : Terminologie,
classification et méthodes d'essai pour produits à base de
laine isolante à haute température

Feuerfeste Erzeugnisse für Wärmedämmzwecke - Teil 1:
Terminologie, Klassifizierung und Prüfverfahren für
Erzeugnisse aus Hochtemperaturwolle zur
Wärmedämmung

This European Standard was approved by CEN on 25 May 2008.

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Contents		Page
Foreword.....		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Classification temperature.....	7
5	Number of test pieces	9
6	Preparation of test pieces	9
7	Test methods.....	9
8	Test report	20
Bibliography		21

Foreword

This document (EN 1094-1:2008) has been prepared by Technical Committee CEN/TC 187 “Refractory products and materials”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1094-1:1997, EN 1094-3:2003 and ENV 1094-7:1993.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard defines terms for those refractory products and materials which are classed as high temperature insulation wools (HTIW). It also establishes the classification of insulating refractory products made from HTIW and specifies methods for determining the thickness, bulk density, resilience, permanent linear change, tensile strength and moisture and organic matter content of HTIW products.

It applies to HTIW bulk wool, blankets, felts, mats, boards, pre-formed shapes and papers, with the exception of products delivered in a wet state.

Further test procedures are in development and will be included once they have been ratified. These include a 3 point bend test for boards, a length weighted fibre diameter measurement technique by Scanning Electron Microscope, shot content measurement (dry and wet methods) and thermal conductivity measurement. There is a shot content method described in ISO 10635 and there is a thermal conductivity technique described in ASTM C201.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1094 (all parts), *Insulating refractory products*

EN ISO 7500-1, *Metallic materials – Verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Verification and calibration of the force-measuring system (ISO 7500-1:2004)*

3 Terms and definitions

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

3.1 General terms and definitions

3.1.1

high temperature insulation wool

HTIW

man-made mineral wool suitable for use as heat-insulating materials above a temperature of 600°C and divided into amorphous alkaline earth silicate wools (AES), aluminosilicate wools (ASW) and the polycrystalline wools (PCW) with a classification temperature greater than 1 000 °C

3.1.2

wool

non-directional agglomeration of fibres with varying diameter and length distributions

3.1.3

fibre

particles with a length to diameter proportion of $L/D > 3:1$

3.1.4

AES-wool

amorphous wools with a typical composition range as given in Table 1