This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 1094-1:2008

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

© NSAI 2008 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN 1094-1:2008

Incorporating amendments/corrigenda issued since publication:

This standard replaces:	*This standard is based on:* EN 1094-1:2008	*Published:* 2 July, 2008

This Irish Standard was published under the authority of the NSAI and comes into effect on: 4 September, 2008	ICS number: 81.080

NSAI		Sales:	Price Code:
1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	T +353 1 857 6730 F +353 1 857 6729 W standards.ie	H

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

I.S. EN 1094-1:2008

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1094-1

July 2008

ICS 81.080

Supersedes EN 1094-1:1997, EN 1094-3:2003, ENV 1094-7:1993

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.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2008 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 1094-1:2008: E

This is a free page sample. Access the full version online.

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

This is a free page sample. Access the full version online.

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.

This is a free page sample. Access the full version online.

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

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation