

Advanced technical ceramics — Monolithic ceramics — Thermo-physical properties —

Part 1: Determination of thermal expansion

The European Standard EN 821-1:1995 has the status of a
British Standard

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The preparation of this British Standard was entrusted to Technical Committee RPI/13, Advanced technical ceramics, upon which the following bodies were represented:

- AEA Technology
- Aluminium Federation
- British Ceramic Research Ltd.
- British Industrial Ceramic Manufacturers' Association
- Department of Trade and Industry (National Physical Laboratory)
- Flat Glass Manufacturers' Association
- GAMBICA (BEAMA Ltd.)
- Institute of Refractories Engineers
- Ministry of Defence
- Refractories Association of Great Britain
- Society of British Aerospace Companies Limited
- University of Manchester

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National foreword

This British Standard has been prepared by Technical Committee RPI/13, and is the English language version of EN 821-1:1995 *Advanced technical ceramics — Monolithic ceramics — Thermo-physical properties — Part 1: Determination of thermal expansion*, published by the European Committee for Standardization (CEN).

EN 821-1 was produced as a result of international discussions in which the UK took an active part.

EN 821 consists of three Parts:

- *Part 1: Determination of thermal expansion;*
- *Part 2: Determination of thermal diffusivity;*
- *Part 3: Determination of specific heat capacity (ENV).*

Cross-references

Publication referred to	Corresponding British Standard
EN 45001	BS 7501:1989 <i>General criteria for the operation of testing laboratories</i>
ENV 1006	DD ENV:1994 <i>Advanced technical ceramics — Methods of testing monolithic ceramics — Guidance on the sampling and selection of test pieces</i>
	BS 4937 <i>International thermocouple reference tables</i>
HD 446.1 S1	Part 1:1973 <i>Platinum-10 % rhodium/platinum thermocouples. Type S</i>
	Part 2:1973 <i>Platinum-13 % rhodium/platinum thermocouples. Type R</i>
	Part 3:1973 <i>Iron/copper-nickel thermocouples. Type J</i>
	Part 4:1973 <i>Nickel-chromium/nickel-aluminium thermocouples. Type K</i>
	Part 5:1974 <i>Copper/copper-nickel thermocouples. Type T</i>
	Part 6:1974 <i>Nickel-chromium/copper-nickel thermocouples. Type E</i>
	Part 7:1974 <i>Platinum-30 % rhodium/platinum-6 % rhodium thermocouples. Type B</i>
	Part 8:1986 <i>Nickel-chromium-silicon/nickel-silicon (nicrosil/nisil) thermocouples including composition. Type N</i>

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Advanced technical ceramics — Monolithic ceramics — Thermo-physical properties — Part 1: Determination of thermal expansion

Céramiques techniques avancées —
Céramiques monolithiques — Propriétés
thermo-physiques — Partie 1: Détermination
de la dilatation thermique

Hochleistungskeramik — Monolithische
Keramik — Thermophysikalische
Eigenschaften — Teil 1: Bestimmung der
thermischen Längenänderung

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European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 184, Advanced technical ceramics, 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 July 1995, and conflicting national standards shall be withdrawn at the latest by July 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

EN 821 consists of three Parts:

- *Part 1: Determination of thermal expansion;*
- *Part 2: Determination of thermal diffusivity;*
- *Part 3: Determination of specific heat capacity (ENV).*

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