

STN	Textílie a textilné výrobky. Textílie s obsahom materiálov s fázovou premenou (PCM). Časť 1: Stanovenie akumulovanej a uvoľnenej tepelnej kapacity.	STN EN 16806-1 80 0891
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Textiles and textile products - Textiles containing phase change materials (PCM) - Part 1: Determination of the heat storage and release capacity

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/16

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EUROPEAN STANDARD
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EN 16806-1

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English Version

**Textiles and textile products - Textiles containing phase
change materials (PCM) - Part 1: Determination of the heat
storage and release capacity**

Textiles et produits textiles - Textiles contenant des
matériaux à changement de phase (PCM) - Partie 1:
Détermination de la capacité de stockage et de
dégagement de chaleur

Textilien und textile Erzeugnisse -
Phasenwechselmaterialien enthaltende Textilien
(PCM) - Teil 1: Bestimmung der Wärmespeicherungs-
und Wärmefreisetzungskapazität

This European Standard was approved by CEN on 15 January 2016.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 16806-1:2016) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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EN 16806, Textiles and textile products — Textiles containing phase change materials (PCM), consists of the following parts:

- *Textiles and textile products — Textiles containing phase change materials (PCM) — Part 1: Determination of the heat storage and release capacity*
- *Textiles and textile products — Textiles containing phase change materials (PCM) — Part 2: Determination of the heat transfer using a dynamic method*
- *Textiles and textile products — Textiles containing phase change materials (PCM) — Part 3: Determination of the heat transfer between the user and the product.*

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1 Scope

This part of EN 16806 specifies a test method for the determination of the heat storage and heat release capacity and the phase change temperatures of textile fibres, yarns and fabrics (woven and knitted fabrics, nonwovens) containing phase change materials (PCM). The test method can also be applied for pure or micro-encapsulated PCM.

This part of EN 16806 does not apply to the determination of the heat transfer properties of textile fabrics (woven and knitted fabrics, nonwovens) containing phase change materials, for which part 2 of EN 16806 applies.

This part of EN 16806 does not apply to determining the heat transfer between the user and the product for textile products, e.g. garments, mattresses, etc. made with PCM containing materials, for which part 3 of EN 16806 applies.

2 Normative references

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

EN 12127, *Textiles - Fabrics - Determination of mass per unit area using small samples*

EN ISO 139, *Textiles - Standard atmospheres for conditioning and testing (ISO 139)*

EN ISO 11357-1, *Plastics - Differential scanning calorimetry (DSC) - Part 1: General principles (ISO 11357-1)*

EN ISO 11357-3, *Plastics - Differential scanning calorimetry (DSC) - Part 3: Determination of temperature and enthalpy of melting and crystallization (ISO 11357-3)*

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