ICS 91.100.60 SLOVENSKÁ TECHNICKÁ NORMA Júl 2016

STN	**Tepelnoizolačné výrobky pre technické zariadenia budov a priemyselné inštalácie. Prefabrikované výrobky z expandovaného polystyrénu (EPS). Špecifikácia.**	**STN EN 14309** 72 7245

Thermal insulation products for building equipment and industrial installations - Factory made products of expanded polystyrene (EPS) - Specification

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

Obsahuje: EN 14309:2015

Oznámením tejto normy sa od 01.10.2017 ruší
STN EN 14309+A1 (72 7245) z júna 2013

123030

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14309

December 2015

ICS 91.100.60

Supersedes EN 14309:2009+A1:2013

English Version

Thermal insulation products for building equipment and industrial installations - Factory made products of expanded polystyrene (EPS) - Specification

Produits isolants thermiques pour l'équipement du bâtiment et les installations industrielles - Produits manufacturés en polystyrène expansé (PSE) - Spécification

Wärmedämmstoffe für die technische Gebäudeausrüstung und für betriebstechnische Anlagen in der Industrie - Werkmäßig hergestellte Produkte aus expandiertem Polystyrol (EPS) - Spezifikation

This European Standard was approved by CEN on 24 October 2015.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

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

Ref. No. EN 14309:2015 E

Contents

Page

European foreword

This document (EN 14309:2015) has been prepared by Technical Committee CEN/TC 88 “Thermal insulating materials and products”, the secretariat of which is held by DIN.

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 June 2016, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 14309:2009+A1:2013.

This document is identifying those clauses of the standard which are needed for the compliance of the European Standard with the Construction Products Regulation (CPR).

The main technical changes that have been made in this new edition of EN 14309 are the following:

a) an addition to the foreword;

b) an addition in 3.2.2;

c) a new 4.3.15;

d) modification of 5.3.2;

e) modification of Clause 7;

f) modification of Clause 8;

g) modification of Annex A;

h) a new Annex ZA.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

Locally responsible authorities and contracting entities, who are bound by EU Directives to specify their requirements using European harmonized product standards, are allowed to demand additional properties outside the provisions of this standard if this is technically necessary because of prevailing operational conditions of the building equipment or the industrial installation projected or because of safety regulations.

This European Standard contains five annexes:

— Annex A (normative), Factory production control;

— Annex B (normative), Product classification;

— Annex C (normative), Determination of minimum service temperature;

— Annex D (informative), Additional properties;

— Annex ZA (informative), Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation.

This document includes a bibliography.

This European Standard is one of a series of standards for insulation products used in building equipment and industrial installations, but this standard can be used in other areas, where appropriate.

In pursuance of Resolution BT 20/1993 revised, CEN/TC 88 have proposed defining the standards listed below as a European package of standards, setting 21 months after availability as the date of withdrawal (dow) of national standards which conflict with the European Standards of this package.

The package of standards comprises the following group of interrelated standards for the specifications of factory made thermal insulation products, all of which come within the scope of CEN/TC 88:

EN 14303, *Thermal insulation products for building equipment and industrial installations — Factory made mineral wool (MW) products — Specification*

EN 14304, *Thermal insulation products for building equipment and industrial installations — Factory made flexible elastomeric foam (FEF) products — Specification*

EN 14305, *Thermal insulation products for building equipment and industrial installations — Factory made cellular glass (CG) products — Specification*

EN 14306, *Thermal insulation products for building equipment and industrial installations — Factory made calcium silicate (CS) products — Specification*

EN 14307, *Thermal insulation products for building equipment and industrial installations — Factory made extruded polystyrene foam (XPS) products — Specification*

EN 14308, *Thermal insulation products for building equipment and industrial installations — Factory made rigid polyurethane foam (PUR) and polyisocyanurate foam (PIR) products — Specification*

EN 14309, *Thermal insulation products for building equipment and industrial installations — Factory made products of expanded polystyrene (EPS) — Specification*

EN 14313, *Thermal insulation products for building equipment and industrial installations — Factory made polyethylene foam (PEF) products — Specification*

EN 14314, *Thermal insulation products for building equipment and industrial installations — Factory made phenolic foam (PF) products — Specification*

EN 15501, *Thermal insulation products for building equipment and industrial installations — Factory made expanded perlite (EP) and exfoliated vermiculite (EV) products — Specification*

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements for factory made products of expanded polystyrene which are used for the thermal insulation of building equipment and industrial installations with an operating temperature range of approximately - 180 °C to + 80 °C. Modified expanded polystyrene polymers with a higher temperature resistance are also covered by this standard.

Below an operating temperature of - 50 °C, special tests regarding the suitability of the product in the intended application are advised (e.g. liquefaction of oxygen). Manufacturers' advice should be heeded in all cases.

The products are manufactured in the form of faced or unfaced boards, rolls, lags, pipe sections or other prefabricated ware.

This standard describes product characteristics and includes procedures for testing, evaluation of conformity, marking and labelling.

Products covered by this standard are also used in prefabricated thermal insulation systems and composite panels; the performance of systems incorporating these products is not covered.

This standard does not specify the required level or class of a given property that should be achieved by a product to demonstrate fitness for purpose in a particular application. The classes and levels required for a given application can be found in regulations and invitations to tender.

Products with a declared thermal conductivity greater than 0,060 W/(m·K) at 10 °C are not covered by this standard.

This standard does not cover products for *in situ* insulation (for loose fill or poured insulation) or products for the insulation of the building structure.

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 822, *Thermal insulating products for building applications - Determination of length and width*

EN 823, *Thermal insulating products for building applications - Determination of thickness*

EN 824, *Thermal insulating products for building applications - Determination of squareness*

EN 825, *Thermal insulating products for building applications - Determination of flatness*

EN 826, *Thermal insulating products for building applications - Determination of compression behaviour*

EN 1602, *Thermal insulating products for building applications - Determination of the apparent density*

EN 1603, *Thermal insulating products for building applications - Determination of dimensional stability under constant normal laboratory conditions (23 °C/ 50 % relative humidity)*

EN 1604, *Thermal insulating products for building applications - Determination of dimensional stability under specified temperature and humidity conditions*

EN 1606, *Thermal insulating products for building applications - Determination of compressive creep*

EN 1607, *Thermal insulating products for building applications - Determination of tensile strength perpendicular to faces*

EN 12085, *Thermal insulating products for building applications - Determination of linear dimensions of test specimens*

EN 12086, *Thermal insulating products for building applications - Determination of water vapour transmission properties*

EN 12087, *Thermal insulating products for building applications - Determination of long term water absorption by immersion*

EN 12088, *Thermal insulating products for building applications - Determination of long term water absorption by diffusion*

EN 12089, *Thermal insulating products for building applications - Determination of bending behaviour*

EN 12091, *Thermal insulating products for building applications - Determination of freeze-thaw resistance*

EN 12431, *Thermal insulating products for building applications - Determination of thickness for floating floor insulating products*

EN 12667, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Products of high and medium thermal resistance*

EN 12939, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Thick products of high and medium thermal resistance*

EN 13163, *Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products - Specification*

EN 13172:2012, *Thermal insulation products - Evaluation of conformity*

EN 13467, *Thermal insulating products for building equipment and industrial installations - Determination of dimensions, squareness and linearity of preformed pipe insulation*

EN 13468, *Thermal insulating products for building equipment and industrial installations - Determination of trace quantities of water soluble chloride, fluoride, silicate, sodium ions and pH*

EN 13469, *Thermal insulating products for building equipment and industrial installations - Determination of water vapour transmission properties of preformed pipe insulation*

EN 13470, *Thermal insulating products for building equipment and industrial installations - Determination of the apparent density of preformed pipe insulation*

EN 13501-1:2007+A1:2009, *Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests*

EN 13823, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

EN 14706, *Thermal insulating products for building equipment and industrial installations - Determination of maximum service temperature*

EN 14707, *Thermal insulating products for building equipment and industrial installations - Determination of maximum service temperature for preformed pipe insulation*

EN 14933, *Thermal insulation and light weight fill products for civil engineering applications - Factory made products of expanded polystyrene (EPS) - Specification*

EN 15715:2009, *Thermal insulation products - Instructions for mounting and fixing for reaction to fire testing - Factory made products*

EN 29052-1, *Acoustics - Determination of dynamic stiffness - Part 1: Materials used under floating floors in dwellings*

EN ISO 1182, *Reaction to fire tests for products - Non-combustibility test (ISO 1182:2010)*

EN ISO 1716, *Reaction to fire tests for products - Determination of the gross heat of combustion (calorific value) (ISO 1716:2010)*

EN ISO 8497, *Thermal insulation - Determination of steady-state thermal transmission properties of thermal insulation for circular pipes (ISO 8497:1994)*

EN ISO 9229:2007, *Thermal insulation - Vocabulary (ISO 9229:2007)*

EN ISO 11925-2, *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2:2010)*

EN ISO 13787, *Thermal insulation products for building equipment and industrial installations - Determination of declared thermal conductivity (ISO 13787:2003)*