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# SVENSK STANDARD SS-EN ISO 15103-1:2004

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Utgåva 1

**Plast – Sprutmassor av polyfenyleter (PPE) –  
Del 1: Beteckningssystem och specifikationsgrund  
(ISO 15103-1:2000)**

**Plastics – Poly(phenylene ether) (PPE) moulding  
and extrusion materials –  
Part 1: Designation system and basis for specifications  
(ISO 15103-1:2000)**

ICS 83.080.20

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The European Standard EN ISO 15103-1:2004 has the status of a Swedish Standard. This document contains the official English version of EN ISO 15103-1:2004.

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English version

Plastics - Poly(phenylene ether) (PPE) moulding and extrusion  
materials - Part 1: Designation system and basis for  
specifications (ISO 15103-1:2000)

Plastiques - Matériaux à base de poly(phénylène éther)  
(PPE) pour moulage et extrusion - Partie 1: Système de  
désignation et base de spécification (ISO 15103-1:2000)

Kunststoffe - Polyphenylether(PPE)-Formmassen - Teil 1:  
Bezeichnungssystem und Basis für Spezifikationen (ISO  
15103-1:2000)

This European Standard was approved by CEN on 21 June 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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## Foreword

The text of ISO 15103-1:2000 has been prepared by Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15103-1:2004 by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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of an identical text or by endorsement, at the latest by January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

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

## Endorsement notice

The text of ISO 15103-1:2000 has been approved by CEN as EN ISO 15103-1:2004 without any modifications.

NOTE Normative references to International Standards are listed in Annex ZA (normative).

# Plastics — Poly(phenylene ether) (PPE) moulding and extrusion materials —

## Part 1: Designation system and basis for specifications

### 1 Scope

**1.1** This part of ISO 15103 establishes a system of designation for PPE thermoplastic materials, which may be used as the basis for specifications.

**1.2** The types of PPE plastic are differentiated from each other by a classification system based on appropriate levels of the designatory properties

- a) temperature of deflection under load
- b) Charpy notched impact strength
- c) flammability

and on information about basic polymer parameters, intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials.

**1.3** This part of ISO 15103 is applicable to all PPE materials, including those modified with polystyrene or polyamide or other materials.

It applies to materials ready for normal use in the form of powder, granules or pellets and to materials unmodified or modified by colorants, additives, fillers, etc.

**1.4** It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 15103 does not provide engineering data, performance data or data on processing conditions which may be required to specify a material for a particular application and/or method of processing.

If such additional properties are required, they shall be determined in accordance with the test methods specified in part 2 of this International Standard, if suitable.

**1.5** In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements may be given in data block 5 (see 3.1).

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 15103. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 15103 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1043-1:1997, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*.

ISO 1043-2:—<sup>1)</sup>, *Plastics — Symbols and abbreviated terms — Part 2: Fillers and reinforcing materials.*

ISO 15103-2:2000, *Plastics — Poly(phenylene ether) (PPE) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties.*

### 3 Designation system

#### 3.1 General

The designation system for thermoplastics is based on the following standardized pattern:

Designation						
Description block (optional)	Identity block					
	International Standard number block	Individual-item block				
		Data block 1	Data block 2	Data block 3	Data block 4	Data block 5

The designation consists of an optional description block, reading “Thermoplastics”, and an identity block comprising the International Standard number and an individual-item block. For unambiguous coding, the individual-item block is subdivided into 5 data blocks comprising the following information:

- Data block 1: Identification of the plastic by its symbol PPE in accordance with ISO 1043-1 and information about the composition of the polymer (see 3.2).
- Data block 2: Position 1: intended application or method of processing (see 3.3).  
Positions 2 to 8: important properties, additives and supplementary information (see 3.3).
- Data block 3: Designatory properties (see 3.4).
- Data block 4: Fillers or reinforcing materials and their nominal content (see 3.5).
- Data block 5: For the purposes of specifications, a fifth data block may be added containing additional information.

The first character of the individual-item block shall be a hyphen. The data blocks shall be separated from each other by commas.

If a data block is not used, this shall be indicated by doubling the separation sign, i.e. by two commas (,,).

#### 3.2 Data block 1

In this data block, after the hyphen, poly(phenylene ether) materials are identified by the symbol PPE, in accordance with ISO 1043-1, followed by a hyphen and a code-number giving additional information on the polymer, as specified in Table 1.

1) To be published. (Revision of ISO 1043-2:1988)