Plastid. Vinüülkloriidi homopolümeer- ja kopolümeervaigud. Osa 1: Tähistussüsteem ja alus tehniliste andmete jaoks

Plastics - Homopolymer and copolymer resins of vinyl chloride - Part 1: Designation system and basis for specifications (ISO 1060-1:1998)



## **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 1060-1:2000 sisaldab Euroopa standardi EN ISO 1060-1:1999 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 1060-1:2000 consists of the English text of the European standard EN ISO 1060-1:1999.

Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This part of ISO 1060 establishes a system of designation fo rvinyl chloride thermoplastic resins, which may be used as the basis for specifications

### Scope:

This part of ISO 1060 establishes a system of designation fo rvinyl chloride thermoplastic resins, which may be used as the basis for specifications

**ICS** 83.080.20

**Võtmesõnad:** alphanumeric codes, copolymers, data blocks, designation, homopolymers, plastics, specifications, thermoplastic resins, vinyl chloride, vinyl resins

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 1060-1

May 1999

83.080.20

#### **English version**

**Plastics** 

## propolymer and copolymer resins of vinyl chloride

2art 1: Designation system and basis for specifications (ISO 1060-1:1998)

Plastiques - Résines d'homopolymères et de copolymères de chlorure de vinyle - Partie 1: Système de désignation et base de spécification (ISO 1060-1:1998)

Kunststoffe - Homo- und Copolymere des Vinylchlorids - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 1060-1:1998)

This European Standard was approved by CEN on 1999-04-18.

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

The European Standards exist 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.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, SI. and the United Kingdom.

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

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

Page 2 EN ISO 1060-1: 1999

#### **Foreword**

International Standard

ISO 1060-1:1998 Plastics – Homopolymer and copolymer resins of vinyl chloride – Part 1: Designation system and basis for specifications,

which was prepared by ISO/TC 61 'Plastics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 249 'Plastics', the Secretariat of which is held by IBN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by November 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## **Endorsement notice**

The text of the International Standard ISO 1060-1: 1998 was approved by CEN as a European Standard without any modification.

## 1 Scope

- **1.1** This part of ISO 1060 establishes a system of designation for vinyl chloride thermoplastic resins, which may be used as the basis for specifications.
- **1.2** The types of vinyl chloride plastics are differentiated from each other by a classification system based on appropriate levels of the designatory properties:
- a) reduced viscosity
- b) apparent density
- c) retention on a 63 μm mesh sieve
- d) plasticizer absorption at room temperature (for general-purpose resins and filler resins only)
- e) the viscosity and the type of rheological behaviour of a standard paste (for paste resins only)

and on information about basic polymer parameters, polymerization processes and intended applications.

- **1.3** This part of ISO 1060 is applicable to resins in powder form which consist of homopolymers of the monomer vinyl chloride and copolymers, terpolymers, etc., of vinyl chloride with one or more other monomers, but where vinyl chloride is the main constituent. The resins may contain small amounts of non-polymerized substances (e.g. emulsifying or suspending agents, catalyst residues, etc.) and other substances added during the course of polymerization.
- **1.4** It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 1060 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 resin for a particular application or to ensure reproducible processing, additional requirements may be given in data block 5 (see clause 3, introductory paragraph).

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 1060. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 1060 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO 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 1060-2:1998, Plastics — Homopolymer and copolymer resins of vinyl chloride — Preparation of test samples and determination of properties.

## 3 Designation and specification system

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

Designation						
	Description block International Individual-item block					
Description block						
(optional)	block	Data block	Data block	Data block	Data block	Data block
		<del>3</del> 1	2	3	4	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 designation, the individual-item block is subdivided into five data blocks providing the following information:

- Data block 1: Identification of the plastic by its symbol (PVC, etc.) in accordance with ISO 1043-1 and information about the polymerization process and the composition of the polymer (see 3.1).
- Data block 2: Intended application (see 3.2).
- Data block 3: Designatory properties (see 3.3).
- Data block 4: Fillers or reinforcing materials and their hominal content (not included in this standard).
- Data block 5: For the purpose of specifications, a fifth data block may be added containing additional information (see 3.4).

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 signal. by two commas (,,).

#### 3.1 Data block 1

In this data block, after the hyphen, vinyl chloride polymer resins are identified by the symbol PVC or VC/.../... for homopolymers or copolymers/terpolymers respectively, in accordance with ISO 1043-1, followed, for copolymers/terpolymers, by a space and by a two-figure number indicating the percentage content of combined vinyl chloride. This is calculated from the chlorine content determined in accordance with ISO 1060-2, using the equation

$$[VC] = 1,762.9 \times [CI]$$

After a hyphen, the polymerization process is indicated by a single code-letter as specified in table 1.