

Coating Powders - Part 6: Determination of gel time of thermosetting coating powders at a given temperature

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 8130-6:2010 sisaldab Euroopa standardi EN ISO 8130-6:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 10.11.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 8130-6:2010 consists of the English text of the European standard EN ISO 8130-6:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 10.11.2010.

The standard is available from Estonian standardisation organisation.

ICS 87.040

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

English Version

Coating Powders - Part 6: Determination of gel time of
thermosetting coating powders at a given temperature (ISO
8130-6:1992, including Amd 1:1998)

Poudres pour revêtement - Partie 6: Détermination du
temps de gélification à une température donnée de
poudres thermodurcissables (ISO 8130-6:1992, Amd
1:1998 inclus)

Pulverlacke - Teil 6: Bestimmung der Gelzeit von
wärmehärtenden Pulverlacken bei einer gegebenen
Temperatur (ISO 8130-6:1992, einschließlich Amd 1:1998)

This European Standard was approved by CEN on 16 October 2010.

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 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 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 8130-6:1992, including Amd 1:1998 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 8130-6:2010 by Technical Committee CEN/TC 139 "Paints and varnishes" 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 May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.

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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 8130-6:1992, including Amd 1:1998 has been approved by CEN as a EN ISO 8130-6:2010 without any modification.

Coating powders —

Part 6:

Determination of gel time of thermosetting coating powders at a given temperature

1 Scope

This part of ISO 8130 specifies a method for the determination of the time for a thermosetting coating powder to gel at a specified temperature, normally 180 °C.

NOTE 1 The determination of the gel time is a very simple method for the characterization and quality control of coating powders. However, the gel time determined by this method is not directly related to the time for a coating powder to cure in practical applications.

The method is not applicable to coating powders with ultra-short gel times (less than 15 s).

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 8130. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8130 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8130-9:1992, *Coating powders — Part 9: Sampling*.

3 Definition

For the purposes of this part of ISO 8130, the following definition applies.

3.1 gel time: The time taken for a specified volume of coating powder to become non-deformable, under specified conditions, after melting.

4 Principle

A test portion of a specified volume of coating powder is heated to a specified temperature in a depression in a heating block. The time at which threads can no longer be pulled from the molten product is determined.

5 Materials

5.1 Test substances of known melting point for checking the temperature of the heating block (6.1).

NOTE 2 For a test temperature of 180 °C, D-camphor is a suitable material.

5.2 Release agent, such as an aerosol dispersion of polytetrafluoroethylene.

6 Apparatus

6.1 Heating block, consisting of an electrically heated steel block of sufficient mass to maintain temperature stability, i.e. to ensure that the temperature selected within the range of 130 °C to 230 °C does not vary by more than ± 1 °C. The temperature shall be controlled by means of a thermoregulator.

The block shall have a spherical, polished depression, with a diameter of $(16 \pm 0,1)$ mm and a radius of curvature of $(10 \pm 0,1)$ mm in the centre of the top surface to contain the test portion.