Plastics - Preparation of PVC pastes for test purposes - Planetary-mixer method

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 4612:2000 sisaldab Euroopa standardi EN ISO 4612:1999 ingliskeelset teksti. Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 4612:2000 consists of the English text of the European standard EN ISO 4612:1999. This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard specifies two methods A and B for the preparation of pastes (also known as plastisols) from appropriate PVC resins, plasticisers and other ingredients using a planetary mixing process. Both method A and B can be used to prepare pastes of all compositions.	**Scope:** This standard specifies two methods A and B for the preparation of pastes (also known as plastisols) from appropriate PVC resins, plasticisers and other ingredients using a planetary mixing process. Both method A and B can be used to prepare pastes of all compositions.

ICS 83.080.20

Võtmesõnad: pastes, plastics, polyvinyl chloride, specimen preparation, test specimens, vinyl resins

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 4612

August 1999

ICS 83.080.00

English version

Plastics

Preparation of PVC pastes for test purposes

Planetary-mixer method
(ISO 4612 : 1999)

Plastiques – Préparation des pâtes PVC pour essais – Méthodes utilisant un mélangeur planétaire (ISO 4612 : 1999)

Kunststoffe – Herstellung von PVC-Pasten für Prüfzwecke – Planetenmischerverfahren (ISO 4612 : 1999)

This European Standard was approved by CEN on 1999-07-23.

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.

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, and the United Kingdom.

CEN

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

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

Foreword

International Standard

ISO 4612 : 1999 Plastics – Preparation of PVC pastes for test purposes – Planetary-mixer method,

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 February 2000 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 4612 : 1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This International Standard specifies two methods, A and B, for the preparation of pastes (also known as plastisols) from appropriate PVC resins, plasticizers and other ingredients using a planetary mixing process.

Both method A and method B can be used to prepare pastes of any composition. Method A (single-speed) is particularly applicable to resins prone to heat build-up during paste preparation, while method B (two-speed) might be preferred for repetitive work, e.g. for process control during resin manufacture, because of its shorter mixing time.

Such pastes may be used for a variety of test purposes, including the determination of rheological properties for resin designation and specification.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments or revisions apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document 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 291:1997, *Plastics — Standard atmospheres for conditioning and testing.*

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1
paste
plastisol
a homogeneous dispersion of PVC resin in an organic liquid

3.2
planetary mixer
a mixer in which the beater or stirrer not only rotates about an axis within the mixing vessel, but the axis of rotation itself also describes a circular path

4 Principle

Liquid plasticizer, PVC resin powder and other appropriate ingredients, in liquid, paste or powder form, are combined in a mixer where the shearing action causes the powder(s) to disperse in the liquid(s).

The paste-making process involves the partial solvation of the resin powder by the plasticizer, and hence the "dispersion" will remain in liquid form for prolonged periods, i.e. the powder does not readily settle out.