

Adhesives for leather and footwear materials - Preparation of bonded test pieces by moulding-on processes

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processes

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14294:2004 sisaldab Euroopa standardi EN 14294:2004 ingliskeelset teksti.	This Estonian standard EVS-EN 14294:2004 consists of the English text of the European standard EN 14294:2004.
Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 21.12.2004 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 Standard specifies procedures for the preparation of test pieces comprising adhesive coated leather or other footwear upper material onto which a soling material is moulded directly. The procedures described simulate direct vulcanising of rubber, injection moulding of thermoplastics and reaction moulding of polyurethane. The prepared test pieces are suitable for the test procedures described in EN 1392, to meet the requirements of EN 522 and EN 1391.	Scope: This Standard specifies procedures for the preparation of test pieces comprising adhesive coated leather or other footwear upper material onto which a soling material is moulded directly. The procedures described simulate direct vulcanising of rubber, injection moulding of thermoplastics and reaction moulding of polyurethane. The prepared test pieces are suitable for the test procedures described in EN 1392, to meet the requirements of EN 522 and EN 1391.
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Võtmesõnad: mate, minimum requirements, mouldability, moulded parts, processing, production, properties, samples, soles, specification (approval), specifications, specimen preparation, tensile strength, tension-shear strength, testing, testing devices, waiting periods, vulcanize

ICS

English version

Adhesives for leather and footwear materials - Preparation of bonded test pieces by moulding-on processes

Adhésifs pour cuir et matériaux de la chaussure -
Préparation d'éprouvettes collées par moulage direct sur
tige

Klebstoffe für Leder und Schuhwerkstoffe - Herstellung von
Verbund-Proben nach dem Anformverfahren

This European Standard was approved by CEN on 1 July 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

This document (EN 14294:2004) has been prepared by Technical Committee CEN/TC 193 “Adhesives”, the secretariat of which is held by AENOR.

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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 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.

Introduction

Documents EN 522, EN 1391 and EN 1392 specify methods of testing and evaluation of adhesives for leather and footwear materials in 'stuck-on' assemblies. Most footwear produced in Europe is manufactured using stuck-on processes, but a significant proportion is produced by 'moulding-on' processes such as vulcanising, injection moulding and reaction moulding.

This document specifies the preparation of bonded test pieces by moulding-on processes. The form and dimensions of the test pieces produced allows testing according to the test methods specified in EN 1392, and evaluation of the bond strength obtained according to EN 522 or EN 1391.

This document therefore complements the above mentioned series of documents, and together they allow the simulation, testing and evaluation of almost all bonds occurring in common footwear constructions.

1 Scope

This document specifies procedures for the preparation of test pieces comprising adhesive coated leather or other footwear upper material onto which a soling material is moulded directly. The procedures described simulate direct vulcanising of rubber, injection moulding of thermoplastics and reaction moulding of polyurethane.

The prepared test pieces are suitable for the test procedures described in EN 1392, to meet the requirements of EN 522 and EN 1391.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 923, *Adhesives - Terms and definitions*

EN 1392, *Adhesives for leather and footwear materials - Solvent-based and dispersion adhesives - Test methods for measuring the bond strength under specified conditions*

EN ISO 868, *Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923 and EN 1392 and the following apply:

3.1

moulding-on process

process for soling footwear in which the soling material is directly moulded onto the bottom of the shoe in a mould closed by the shoe upper or other footwear component.

NOTE The other footwear component can be an outsole or midsole onto which another soling layer is to be moulded.

3.2

vulcanising

moulding process in which uncured rubber is inserted or extruded into the mould and is shaped and crosslinked by heat and pressure.

3.3

injection moulding

moulding process in which molten thermoplastic material is injected into the mould and sets on cooling.

3.4

reaction moulding

moulding process in which reactive chemicals are poured or injected into the mould and polymerise and crosslink by chemical reaction.