

Adhesives for paper and board, packaging and disposable sanitary products - Determination of foam formation for aqueous adhesives

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12704:2016 sisaldab Euroopa standardi EN 12704:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 12704:2016 consists of the English text of the European standard EN 12704:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 03.08.2016.	Date of Availability of the European standard is 03.08.2016.
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ICS 83.180

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English Version

**Adhesives for paper and board, packaging and disposable
sanitary products - Determination of foam formation for
aqueous adhesives**

Adhésifs pour papier, carton, emballage et produits
sanitaires jetables - Détermination de la formation de
mousse des adhésifs aqueux

Klebstoffe für Papier, Verpackung und
Hygieneprodukte - Bestimmung der Schaumbildung
von wässrigen Klebstoffen

This European Standard was approved by CEN on 6 May 2016.

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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-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 12704:2016) 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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12704:2012.

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

Introduction

SAFETY STATEMENT — Persons using this document should be familiar with the normal laboratory practice, if applicable. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any regulatory conditions.

ENVIRONMENTAL STATEMENT — It is understood that some of the material permitted in this standard may have negative environmental impact. As technological advantages lead to acceptable alternatives for these materials, they will be eliminated from this standard to the extent possible.

At the end of the test, the user of the standard should take care to carry out an appropriate disposal of the wastes, according to local regulation.

1 Scope

This European Standard specifies a test method to determine the foam formation, or air entrainment during rapid stirring of aqueous adhesives with a maximum viscosity of 10 000 MPa·s at room temperature determined in accordance with EN 12092.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 1067, *Adhesives - Examination and preparation of samples for testing*

EN ISO 15605, *Adhesives - Sampling (ISO 15605)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923 apply.

4 Principle

The adhesive is stirred under defined conditions and the foam formation determined from the differences between the initial and final volumes of the adhesive.

5 Apparatus

Specimens shall be conditioned for 24 h at 23 °C and 50 % RH.

5.1 Stirrer motor, capable of driving the stirrer at an adjustable rotary speed up to 3 000 min⁻¹.

5.2 Stirrer, with dimensions as shown in Figure 1.

5.3 Beaker, 2 l, of transparent material of approximately dimensions, $h = 230$ mm, $d = 105$ mm.

5.4 Balance, accuracy $\pm 1,0$ g.

5.5 Mechanical system, to secure the stirrer and beaker.

5.6 Timer, accuracy ± 1 s.

5.7 Ruler, accuracy ± 1 mm.