

Determination of the flowability and application behaviour of viscoelastic adhesives using the oscillatory rheometry

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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ICS 83.180

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English Version

Determination of the flowability and application behaviour of viscoelastic adhesives using the oscillatory rheometry

Détermination de l'aptitude à l'écoulement et à
l'application des adhésifs viscoélastiques avec la
méthode de la rhéologie oscillométrique

Bestimmung des Fließ- und Applikationsverhaltens
von viskoelastischen Klebstoffen mit Hilfe der
Oszillationsrheometrie

This European Standard was approved by CEN on 3 August 2020.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 17408:2020) has been prepared by Technical Committee CEN/TC 193 “Adhesives”, the secretariat of which is held by UNE.

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1 Scope

This document specifies a measuring method for the characterization of rheological properties of structural adhesives using oscillatory rheometry. Moreover, the testing procedure can be applied to the reactive mixture of several components or the components of a reactive bonding paste material. The advantage of the method in comparison to rotational viscometry measurements lies in the separation of elastic and viscous material properties, thus allowing the defining of the viscoelastic properties. This enables more precise information concerning the flow behaviour of the materials, thereby resulting in a better understanding of their processing properties.

The method described is particularly suitable for filled and paste-like adhesives. These are frequently processed using automated pump and application systems in industrial applications and will be set precisely considering their rheological properties. As the rheological behaviour of uncured adhesives is mostly independent of their properties in the cured state, the document can also serve for the examination of non-structural adhesives.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>