

SVENSK STANDARD

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Konstruktionslim – Korrosion – Del 2: Bestämning och klassificering gällande korrosion av mässingssubstrat

Structural adhesives – Corrosion – Part 2: Determination and classification of corrosion to a brass substrate

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Denna standard ersätter SS-EN 1965-2, utgåva 1.

The European Standard EN 1965-2:2011 has the status of a Swedish Standard. This document contains the official version of EN 1965-2:2011.

This standard supersedes the Swedish Standard SS-EN 1965-2, edition 1.

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EUROPEAN STANDARD

EN 1965-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2011

ICS 77.060; 83.180

Supersedes EN 1965-2:2001

English Version

Structural adhesives - Corrosion - Part 2: Determination and classification of corrosion to a brass substrate

Adhésifs structuraux - Corrosion - Partie 2: Détermination et classification de la corrosion d'un substrat en laiton

Strukturklebstoffe - Korrosion - Teil 2: Bestimmung und Klassifikation der Korrosion eines Messingmaterials

This European Standard was approved by CEN on 10 March 2011.

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

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Foreword

This document (EN 1965-2:2011) 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of an identical text or by endorsement, at the latest by November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.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.

This document supersedes EN 1965-2:2001.

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.

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1 Scope

This European Standard describes a method to determine the ability of an adhesive to corrode a brass substrate under the influence of an applied voltage and high humidity. The temperature, humidity, ageing period and applied voltage are chosen to ensure the maximum differentiation between the corrosivity of different adhesives and are not intended to represent any particular service condition.

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 923:2005+A1:2008, *Adhesives — Terms and definitions*

EN ISO 291, *Plastics — Standard atmospheres for conditioning and testing (ISO 291:2008)*

EN ISO 8044:1999, *Corrosion of metals and alloys — Basic terms and definitions (ISO 8044:1999)*

ISO 426 (all parts), *Wrought copper-zinc alloys — Chemical composition and forms of wrought products*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 923:2005+A1:2008 and the following apply.

3.1

corrosion

destructive attack on metals which can be chemical or electrochemical in nature

NOTE The described method measures essentially an electrochemical attack.

4 Principle

Two brass electrodes are held in contact with a flat sample of the cured adhesive. The assembly is placed in an environment with a relative humidity of 92 % at 42 °C and a direct current voltage of 100 V is applied across the electrodes for four days. Following this the brass surface is examined and the extent of the tarnishing and/or corrosion decided on the basis of discolouration.

5 Products, materials and apparatus

5.1 Solvents.

Alcohol pure: for example propan-2-ol or ethanol.

5.2 Brass electrode, consisting of 0,1 mm thick brass, Ms63F45 or Ms63F55 of width 10 mm.

The length of the foil shall be adapted to the test equipment in accordance with ISO 426 (all parts).

5.3 Etching solution, consisting of 73 % concentrated sulfuric acid (98 %), 26 % concentrated nitric acid (63 %), 0,5 % sodium chloride, 0,5 % carbon black.