Irish Standard
I.S. EN 15865:2009

Adhesives - Determination of torque strength of anaerobic adhesives on threaded fasteners (ISO 10964:1993 modified)

I.S. EN 15865:2009

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EUROPEAN STANDARD

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EN 15865

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Supersedes EN ISO 10964:1997

English Version

Adhesives - Determination of torque strength of anaerobic adhesives on threaded fasteners (ISO 10964:1993 modified)

Adhésifs - Détermination des couples fonctionnels sur des fixations filetées collées avec des adhésifs anaérobies (ISO 10964:1993 modifiée)

Klebstoffe - Bestimmung der Drehfestigkeit von anaeroben Klebstoffen auf geklebten Gewinden (ISO 10964:1993 modifiziert)

This European Standard was approved by CEN on 26 March 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Foreword

This document (EN 10964:2009) 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of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

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 ISO 10964:1997.

Safety statement

Persons using this document should be familiar with the normal laboratory practice, if applicable. This document cannot 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 better 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 shall take care to carry out an appropriate disposal of the wastes, according to local regulation.

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

1 Scope

The test method described in this European Standard is used to make comparative assessments of the securing or locking effect of anaerobic adhesives used in threaded assemblies. This method may be used for other types of adhesives, if considered suitable.

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 20898-2, *Mechanical properties of fasteners - Part 2: Nuts with specified proof load values – Coarse thread (ISO 898-2:1992)*

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

EN ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel - Part 1: Bolts, screws and studs with specified property classes - Coarse thread and fine pitch thread (ISO 898-1:2009)*

3 Terms and definitions

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

3.1
on torque, T_{ON}
maximum torque required to screw the nut onto a bolt precoated with adhesive

3.2
input torque, T_{IN}
torque applied to introduce or increase the axial load in the assembly

It is used to overcome friction in the thread and under the bolt head

3.3
breakaway torque, T_{BA}
initial torque required to break the bond measured at the first movement between the nut and bolt, when unscrewing an unseated assembly (without spacer sleeve, see Figure 1)