

Glass reinforced plastics - Determination of indentation hardness by means of a Barcol hardness tester

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Glass reinforced plastics - Determination of indentation hardness by means of a Barcol hardness tester

Matières plastiques renforcées de verre -
Détermination de la dureté par pénétration au moyen
d'un appareil d'essai de dureté Barcol

Glasfaserverstärkte Kunststoffe - Bestimmung der
Eindruckhärte mit einem Barcol-Härteprüfgerät

This European Standard was approved by CEN on 26 December 2015.

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Contents	Page
European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Principle	4
4 Apparatus.....	4
5 Test specimens.....	6
5.1 Test surface	6
5.2 Test specimen dimensions.....	7
6 Calibration	7
6.1 Direct calibration	7
6.1.1 Indenter and presser foot	7
6.1.2 Test force.....	7
6.1.3 Penetration depth.....	7
6.2 Verification.....	8
7 Conditioning and testing atmospheres	8
8 Procedure.....	8
9 Number of measurements	9
10 Test report.....	9
Bibliography.....	10

European foreword

This document (EN 59:2016) has been prepared by Technical Committee CEN/TC 249 “Plastics”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by August 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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1 Scope

This European Standard specifies a method for determining the indentation hardness of glass reinforced plastics materials by means of a Barcol hardness tester.

The Barcol hardness tester is a portable device which can be used with a stand. This method is suitable for testing the indentation hardness of individual test specimens or finished products for production control purposes.

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

3 Principle

A specified indenter is forced into the test material under specified conditions and the depth of penetration measured.

4 Apparatus

4.1 Barcol hardness tester

4.1.1 Indenter, formed from a hardened steel truncated cone to the shape shown in Figure 1. The dimensions and their tolerances of the indenter are given in Table 1. It shall fit into a hollow spindle and be held down by a spring.

4.1.2 Presser foot, intended to be placed on the test specimen, to the shape shown in Figure 1. The dimensions and their tolerances of the presser foot are given in Table 1.