

EN 4426:2020
NBN EN 4426:2020

 **NBN**



**Aerospace series - Non-metallic materials - Textiles - Test method
- Determination of conductivity and pH of aqueous extracts**

Valid from 18-03-2020

ICS: 49.025.60

EUROPEAN STANDARD
 NORME EUROPÉENNE
 EUROPÄISCHE NORM

EN 4426

February 2020

ICS 49.025.60

English Version

**Aerospace series - Non-metallic materials - Textiles - Test
 method - Determination of conductivity and pH of aqueous
 extracts**

Série aérospatiale - Matériaux non-métalliques -
 Textiles - Méthode d'essai - Détermination de la
 conductivité et du pH des extraits aqueux

Luft- und Raumfahrt - Nichtmetallische Werkstoffe -
 Textilien - Prüfverfahren - Bestimmung der
 Leitfähigkeit und des pH-Werts in wässrigen
 Lösungen

This European Standard was approved by CEN on 8 December 2019.

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.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
 COMITÉ EUROPÉEN DE NORMALISATION
 EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Contents		Page
European foreword		3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Health, safety and environment	5
5	Principle/technique	6
6	Resources	6
7	Test samples/test pieces	6
8	Test procedure	7
9	Expression of results	8
10	Calculation of pH	8
11	Measurement uncertainties	8
12	Designation	8
13	Test report	8

European foreword

This document (EN 4426:2020) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 4426:2020 (E)**Introduction**

This document is part of the series of EN non-metallic materials standards for aerospace applications. The general organization of this series is described in EN 4385. This document is a level 3 document as defined in EN 4385.

1 Scope

This document specifies the requirements for the determination of conductivity and pH of aqueous extracts of textile materials.

This method has been written in response to an aerospace requirement for a method of extraction using hot water as the EN 1413 requires only a cold water extraction method.

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 1413, *Textiles — Determination of pH of the aqueous extract* ¹⁾

EN 4385, *Aerospace series — Non-metallic materials — General organisation of standardization — Links between types of standards* ²⁾

EN ISO 2231, *Rubber — or plastics-coated fabrics — Standard atmospheres for conditioning and testing* ³⁾

ISO 383, *Laboratory glassware — Interchangeable conical ground joints* ³⁾

3 Terms and definitions

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

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

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

3.1

conductivity

reciprocal of the resistance of an electric current to pass through an electrolyte; the purer the electrolyte the higher the electrical resistance, conversely the lower the conductivity

3.2

pH

cologarithm of the hydrogen ion concentration in an aqueous extract

4 Health, safety and environment

This document does not necessarily include all health and safety requirements associated with its use.

1) This document has been withdrawn in May 2006.

2) Published as ASD-STAN Standard at the date of publication of this document by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN), <http://www.asd-stan.org/>

3) Published by International Organization for Standardization (ISO), <http://www.iso.ch/>