

Aerospace series - Test method - Determination of susceptibility to intergranular corrosion - Wrought aluminium alloy products AL-P2XXX- series, AL-P7XXX- series and aluminium-lithium alloys

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 2716:2018 sisaldab Euroopa standardi EN 2716:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 2716:2018 consists of the English text of the European standard EN 2716:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.11.2018.	Date of Availability of the European standard is 21.11.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 49.025.20

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

**Aerospace series - Test method - Determination of
susceptibility to intergranular corrosion - Wrought
aluminium alloy products AL-P2XXX- series, AL-P7XXX-
series and aluminium-lithium alloys**

Série aérospatiale - Méthodes d'essai - Détermination
de la susceptibilité à la corrosion intergranulaire -
Produits corroyés en alliages d'aluminium série AL-
P2XXX-, série AL-P7XXX- et alliages d'aluminium-
lithium

Luft- und Raumfahrt - Prüfverfahren - Bestimmung der
Anfälligkeit für interkristalline Korrosion - Aluminium-
Knetzeugnisse aus AL-P2XXX-, AL-P7XXX- und
Aluminium-Lithium-Legierung

This European Standard was approved by CEN on 17 September 2018.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Test procedure	4
5 Microscopic examination	5
6 Acceptance criteria	5

European foreword

This document (EN 2716:2018) 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 May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

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.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the procedure for the determination of the susceptibility to intergranular corrosion of wrought aluminium alloys in AL-P2XXX- series, AL-P7XXX- series and aluminium-lithium alloy products.

It does not consider health and safety requirements. It is the responsibility of the user to adopt appropriate health and safety precautions when hazardous substances are involved.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

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 <http://www.iso.org/obp>

4 Test procedure

4.1 Test sample location

Unless otherwise agreed between manufacturer and purchaser, the manufacturer shall define and record the location of the test sample. The test direction shall be parallel to the direction of working.

4.2 Preparation of test samples

Test samples shall be prepared as follows:

- for clad products remove the cladding by a suitable method;
- degrease the test sample in acetone;
- immerse the test sample for 1 min in the solution shown in Table 1 at a temperature of $95\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$.

Table 1 — Solution for the preparation of test samples

Reagents	% vol.
Nitric acid 70 % concentrated	5
Hydrofluoric acid 40 % concentrated	0,5
Demineralised or deionised water	94,5

- rinse in demineralised or deionised water;
- desmutt in nitric acid 70 % concentrated at ambient temperature;
- rinse in demineralised or deionised water;
- dry.