

Aerospace series - Anodic electrodeposition of
hexavalent chromium free primer

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Aerospace series - Anodic electrodeposition of hexavalent chromium free primer

Série aérospatiale - Électrodéposition anodique d'un
primaire sans chrome hexavalent

Luft- und Raumfahrt - Anodische
Elektrotauchlackierung von chrom(VI)-freier
Grundierung

This European Standard was approved by CEN on 12 June 2023.

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

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European foreword

This document (EN 4868:2023) 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 document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.

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1 Scope

This document specifies the requirements for hexavalent chromium free anodic electrodeposition of organic coatings on aluminium and aluminium alloys for corrosion protection of parts.

This document specifies design, quality and manufacturing requirements. It does not specify complete in-house process instructions; these are specified in the processors detailed process instructions.

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 3840, *Aerospace series — Paints and varnishes — Technical specification*

EN ISO 1518-1, *Paints and varnishes — Determination of scratch resistance — Part 1: Constant-loading method* (ISO 1518-1)

EN ISO 1519, *Paints and varnishes — Bend test (cylindrical mandrel)* (ISO 1519)

EN ISO 2409, *Paints and varnishes — Cross-cut test* (ISO 2409)

EN ISO 2812-1, *Paints and varnishes — Determination of resistance to liquids — Part 1: Immersion in liquids other than water* (ISO 2812-1)

EN ISO 2812-2, *Paints and varnishes — Determination of resistance to liquids — Part 2: Water immersion method* (ISO 2812-2)

EN ISO 4623-2, *Paints and varnishes — Determination of resistance to filiform corrosion — Part 2: Aluminium substrates* (ISO 4623-2)

EN ISO 4628-8, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 8: Assessment of degree of delamination and corrosion around a scribe or other artificial defect* (ISO 4628-8)

EN ISO 4628-10, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 10: Assessment of degree of filiform corrosion* (ISO 4628-10)

EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests* (ISO 9227)

EN ISO 17872, *Paints and varnishes — Guidelines for the introduction of scribe marks through coatings on metallic panels for corrosion testing* (ISO 17872)