



BSI Standards Publication

**Aerospace series — Paints and varnishes —
Chromate free (non corrosion inhibiting) two-
components room temperature curing primer —
Chromate free primer for military application**

National foreword

This British Standard is the UK implementation of EN 4687:2021. It supersedes BS EN 4687:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/65, Non-metallic materials for aerospace purposes.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
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English Version

**Aerospace series - Paints and varnishes - Chromate free
(non corrosion inhibiting) two-components room
temperature curing primer - Chromate free primer for
military application**

Série aérospatiale - Peintures et vernis - Peinture
primaire sans chromate (non anticorrosion) à deux
composants polymérisant à température ambiante -
Peinture primaire sans chromate pour applications
militaire

Luft- und Raumfahrt - Beschichtungsstoffe -
Zweikomponenten Grundierung, chromatfrei, nicht
korrosionsschützend, raumtemperaturhärtend für
militärische Anwendung

This European Standard was approved by CEN on 2 November 2020.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 4687:2021) 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, 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of an identical text or by endorsement, at the latest by July 2021, and conflicting national standards shall be withdrawn at the latest by July 2021.

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.

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1 Scope

This document defines the requirements for a two-components, chromate and lead-free primer.

The coating applies to fibre reinforced composite materials, titanium and corrosion resistant steels and other suitably prepared corrosion resistant substrates.

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 2101, *Aerospace series — Chromic acid anodizing of aluminium and wrought aluminium alloys*

EN 2334, *Aerospace series — Chromic-sulphuric acid pickle of aluminium and aluminium alloys*

EN 2437, *Aerospace series — Chromate conversion coatings (yellow) for aluminium and aluminium alloys*

EN 3837, *Aerospace series — Paints and varnishes — Nature and method for surface preparation of test pieces in aluminium alloys*

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

EN 3847, *Aerospace series — Paints and varnishes — Determination of sedimentation rating*

EN 4160, *Aerospace series — Paints and varnishes — Determination of the effect of thermal exposure*

EN 4689, *Aerospace series — Paints and varnishes — Two-components room temperature curing polyurethane finish — High flexibility and chemical agent resistance for military application*

EN 4704, *Aerospace series — Tartaric-Sulphuric-Acid anodizing of aluminium and aluminium wrought alloys for corrosion protection and paint pre-treatment (TSA)*

EN ISO 1513, *Paints and varnishes — Examination and preparation of test samples*

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

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

EN ISO 1520, *Paints and varnishes — Cupping test*

EN ISO 1524, *Paints, varnishes and printing inks — Determination of fineness of grind*

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

EN ISO 2431, *Paints and varnishes — Determination of flow time by use of flow cups*

EN ISO 2811-1, *Paints and varnishes — Determination of density — Part 1: Pycnometer method*

EN ISO 2811-2, *Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method*

EN ISO 2811-3, *Paints and varnishes — Determination of density — Part 3: Oscillation method*