



NSAI
Standards

Irish Standard
I.S. EN 4595:2013

Aerospace series - Paints and varnishes - Two component cold curing polyurethane finish - Subsonic erosion resistance

I.S. EN 4595:2013

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English Version

Aerospace series - Paints and varnishes - Two component cold curing polyurethane finish - Subsonic erosion resistance

Série aéronautique - Peintures et vernis - Deux composants durcissement à froid, finition polyuréthane - Résistance à l'érosion subsonique

Luft- und Raumfahrt - Beschichtungsmaterialien - Zweikomponenten Polyurethan-Decklack, raumtemperaturhärtend - Unterschall-Erosionsbeständigkeit

This European Standard was approved by CEN on 19 February 2011.

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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.

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Foreword

This document (EN 4595:2013) 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of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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.

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Introduction

This standard has been prepared in accordance with AECMA TR 7000-9.

1 Scope

This European Standard specifies the requirements for a two component polyurethane, topcoat, with a medium degree of resistance to erosion by the effects of rain, available in a range of colours and levels of gloss, to be applied over a primer for aerospace applications on areas where rain erosion at subsonic speeds may be a problem e.g. leading edges and air intakes.

The properties specified in this standard are obtained on defined aluminium alloy test pieces prepared in accordance with EN 3837 Procedure A and EN 23270 and painted with primer to EN 2435. The ability of the material to be used for a specific application (e.g. alternative substrate, alternative primer, specific drying conditions etc.) shall be determined by supplementary tests to confirm that the requirements of this standard are met.

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

EN 2379, *Aerospace series — Fluids for assessment of non-metallic materials*¹⁾

EN 2435 (all parts), *Aerospace series — Paints and varnishes — Corrosion resistant chromated two component cold curing primer*

EN 3837, *Aerospace series — Paints and varnishes — Nature and method for surface preparation of test pieces in aluminium alloys*¹⁾

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

EN 23270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing (ISO 3270)*

EN ISO 1513, *Paints and varnishes — Examination and preparation of test samples for testing (ISO 1513)*

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

EN ISO 2811 (all parts), *Paints and varnishes — Determination of density*

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

1) Published as AECMA Prestandard at the date of publication of this standard.

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