

Corrosion protection of metals — Rinsed and non-rinsed chromate conversion coatings on aluminium and aluminium alloys

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ICS 25.220.20

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National foreword

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 16, an inside back cover and a back cover.

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This British Standard, having been prepared under the direction of the Sector Committee for Materials and Chemicals, was published under the authority of the Standards Committee and comes into effect on 15 October 2000

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ISBN 0 580 34681 1

Amendments issued since publication

Amd. No.	Date	Comments

English version

**Corrosion protection of metals - Rinsed and non-rinsed
chromate conversion coatings on aluminium and aluminium
alloys**

Protection contre la corrosion des métaux - Couches de
conversion au chromate rincées et non rincées sur
l'aluminium et les alliages d'aluminium

Korrosionsschutz von Metallen - Gespülte und no-rinse
Chromatierüberzüge auf Aluminium und
Aluminiumlegierungen

This European Standard was approved by CEN on 1 March 2000.

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Contents

	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Information to be supplied by the purchaser	4
5 Coating types and designation	5
5.1 Coating types	5
5.2 Conversion coating designation	5
6 Sampling	6
7 Coating requirements	6
7.1 General	6
7.2 Electrical insulation	6
7.3 Adhesion	6
7.4 Coating mass per unit area	6
7.5 Coating identification	6
7.6 Corrosion resistance	7
Annex A (informative) Process systems	8
Annex B (normative) After-treatments	12
Annex C (normative) Analytical methods for the determination of the coating mass and for the identification of chromium, phosphorus and zinc	13
Annex D (normative) Testing of the layer composition	14
Annex E (informative) Corrosion resistance	16

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 262 "Metallic and other inorganic coatings", the secretariat of which is held by BSI.

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 October 2000, and conflicting national standards shall be withdrawn at the latest by October 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies requirements for rinsed and non-rinsed chromate conversion coatings on aluminium and aluminium alloys intended to give protection against corrosion and as a base for other coatings.

2 Normative references

This European Standard incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN ISO 3892, *Conversion coatings on metallic materials — Determination of coating mass per unit area - Gravimetric methods (ISO 3892 :1980)*.

ISO 4519, *Electrodeposited metallic coatings and related finishes — Sampling procedures for inspection by attributes*.

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*.

IEC 60130-1, *Connectors for frequencies below 3 MHz — Part 1: General requirements and measuring methods*.

3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

3.1

rinsed chromate coating

chromate coating that is rinsed in water prior to drying

NOTE This type of coating is typically applied to extruded and rolled aluminium fabricated parts, castings and long coils.

3.2

non-rinsed chromate coating

chromate coating that is dried immediately after the chromating step without receiving a water rinse

NOTE This type of coating is normally used on long coils of aluminium sheet stock that receive an immediate subsequent paint or adhesive coating. Sometimes referred to as “coil coating”.

4 Information to be supplied by the purchaser

The following information shall be supplied by the purchaser:

- a) the coating designation (see clause 5);
- b) sampling methods, acceptance levels or any other inspection requirements, if different from those given in ISO 4519 (see clause 6);
- c) the surface preparation prior to chromate conversion coating (see annex A for guidance);
- d) the requirements for adhesion (see 7.3) and corrosion resistance (see 7.6);
- e) the nature, condition and finish of the basis metal, if any of these could affect the serviceability and/or the appearance of the coating.