ISO /FDIS 1514:2023(E)

ISO/TC 35/SC 9/WG 31

Secretariat: BSI

Date: 2024-02-1903-22

Paints and varnishes — Standard panels for testing

Peintures et vernis — Panneaux normalisés pour essai

FDIS stage

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CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: + 41 22 749 01 11
EmailE-mail: copyright@iso.org
Website: www.iso.orgwww.iso.org

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This sixth edition cancels and replaces the fifth edition (ISO 1514:2016), which has been technically revised.

The main changes are as follows:

— ~~Clause 3~~Clause 3 (terms and definitions) has been added;

— ~~the~~ the preparation of plastics substrate including glass-fibre reinforced plastic composite panels (GRP) and carbon-fibre reinforced plastic composite panels (CFRP) has been updated;

— ~~concrete~~ concrete test panels have been added;

— ~~the~~ the normative references have been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at ~~www.iso.org/members.html~~www.iso.org/members.html.

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Introduction

For many of the most widely used test methods for paints and varnishes, the type of panel used and the particular way in which it is prepared for use can affect the test results to a significant degree. Consequently, it is important to standardize as carefully as possible both the panels and the procedures used to prepare the panels prior to painting.

It is not possible to include in this document all the types of panels and preparation needed for paint testing. Thus, this document describes preparation procedures that are known to be reproducible and gives additional guidance and requirements in instances where there can still be doubt, due to lack of international uniformity of the procedure.

Common substrate panels and the documents which specify their technical delivery conditions ~~composition~~ are listed in ~~Table B.1,~~Table B.1.

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Paints and varnishes — Standard panels for testing

1 Scope

This document specifies several types of standard panels and ~~describes~~provides guidance and requirements on the procedures for their preparation prior to painting. ~~These~~The standard panels described in this document are intended for use in general methods of test for paints, varnishes and related products.

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.

ISO 1268-1, Fibre-reinforced plastics — Methods of producing test plates — Part 1: General conditions

ISO 1268-2, Fibre-reinforced plastics — Methods of producing test plates — Part 2: Contact and spray-up moulding

ISO 1268-3, Fibre-reinforced plastics — Methods of producing test plates — Part 3: Wet compression moulding

ISO 1268-4, Fibre-reinforced plastics — Methods of producing test plates — Part 4: Moulding of prepregs

ISO 1268-5, Fibre-reinforced plastics — Methods of producing test plates — Part 5: Filament winding

ISO 1268-6, Fibre-reinforced plastics — Methods of producing test plates — Part 6: Pultrusion moulding

ISO 1268-7, Fibre-reinforced plastics — Methods of producing test plates — Part 7: Resin transfer moulding

ISO 1268-8, Fibre-reinforced plastics — Methods of producing test plates — Part 8: Compression moulding of SMC and BMC

ISO 1268-9, Fibre-reinforced plastics — Methods of producing test plates — Part 9: Moulding of GMT/STC

ISO 1268-10, Fibre-reinforced plastics — Methods of producing test plates — Part 10: Injection moulding of BMC and other long-fibre moulding compounds — General principles and moulding of multipurpose test specimens

ISO 1268-11, Fibre-reinforced plastics — Methods of producing test plates — Part 11: Injection moulding of BMC and other long-fibre moulding compounds — Small plates

ISO 2409, Paints and varnishes — Cross-cut test

ISO 2808, Paints and varnishes — Determination of film thickness

ISO 4618, Paints and varnishes — Vocabulary

ISO 8336, Fibre-cement flat sheets — Product specification and test methods

ISO 11949, Cold-reduced tinmill products — Electrolytic tinplate

ISO 21920-2, Geometrical product specifications (GPS) — Surface texture: Profile — Part 2: Terms, definitions and surface texture parameters

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EN 520, Gypsum plasterboards — Definitions, requirements and test methods

EN 622-1, Fibreboards — Specifications — Part 1: General requirements

EN 622-2, Fibreboards — Specifications — Part 2: Requirements for hardboards

EN 622-3, Fibreboards — Specifications — Part 3: Requirements for medium boards

EN 622-4, Fibreboards — Specifications — Part 4: Requirements for softboards

EN 622-5, Fibreboards — Specifications — Part 5: Requirements for dry process boards (MDF)

EN 1396, Aluminium and aluminium alloys — Coil coated sheet and strip for general applications — Specifications

EN 1766, Products and systems for the protection and repair of concrete structures — Test methods — Reference concretes for testing

EN 10205, *Cold reduced tinmill products — Blackplate*

EN 13523-1, Coil coated metals — Test methods — Part 1: Film thickness

EN 13523-22, Coil coated metals — Test methods — Part 22: Colour difference — Visual comparison

EN 15283-2, Gypsum boards with fibrous reinforcement — Definitions, requirements and test methods — Part 2: Gypsum fibre boards

EN 16245-1, Fibre-reinforced plastic composites — Declaration of raw material characteristics — Part 1: General requirements

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obphttps://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/https://www.electropedia.org/

4 Steel panels

4.1 Properties

Steel panels intended for general testing (as opposed to panels intended for testing particular applications and uses) shall be free from rust, scratches, staining, discoloration and other surface defects. The physical dimensions of the panel shall be as specified in the description of the test method, or as otherwise agreed.

4.2 Storage prior to preparation

Prior to preparation, panels shall be stored in a manner that protects them from corrosion.

4.3 Preparation by solvent cleaning

Wipe the panel to remove any excess oil and then wash it thoroughly with a suitable solvent to remove all excess of oil.

