AS ISO 18935:2019
ISO 18935:2018

AS ISO 18935:2019

Australian STANDARD®

Imaging materials — Colour images — Determination of water resistance of printed colour images

STANDARDS Australia

AS ISO 18935:2019

This Australian Standard® was prepared by MS-065, Photography. It was approved on behalf of the Council of Standards Australia on 4 November 2019.

This Standard was published on 13 December 2019.

The following are represented on Committee MS-065:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Institute of Professional Photography
Australian War Memorial
CSIRO Data61
Engineers Australia
State Library of New South Wales
University of New South Wales
University of Technology Sydney
Western Sydney University

This Standard was issued in draft form for comment as DR AS ISO 18935:2019.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76072 667 6

Imaging materials — Colour images — Determination of water resistance of printed colour images

First published as AS ISO 18935:2019.

Preface

This Standard was prepared by the Standards Australia Committee MS-065, Photography.

The objective of this Standard is to specify tests to determine the relative water resistance of printed colour images.

This Standard is applicable to both digital and analogue prints.

This Standard is identical with, and has been reproduced from, ISO 18935:2018, *Imaging materials — Colour images — Determination of water resistance of printed colour images*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

Contents

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 42, *Photography*.

This third edition cancels and replaces the second edition (ISO 18935:2016), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

— changes in Clauses 6 and 8 and in Annex A.

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.

Introduction

Water resistance is not an important consideration in the normal storage of colour prints. However, in a disaster situation, such as floods, earthquakes or water main breaks, this property can be of critical importance if the print is to be salvaged. A wide variety of materials are used for digital colour prints and the colorants used in some digital prints are water soluble. The degree of their water resistance varies depending upon the colorants used and if the print has a water-resistant overcoat. In addition, the paper or other substrate may be of equal importance. The same colorants may exhibit very good water resistance on one substrate but can be completely washed off from a different substrate. Even print systems that use water-insoluble colorants may be damaged by water exposure if the substrate is not also water resistant. This document provides a standardized method to evaluate the qualitative water resistance of colour prints.

NOTES

Australian Standard®

Imaging materials — Colour images — Determination of water resistance of printed colour images

1 Scope

This document specifies tests to determine the relative water resistance of printed colour images. This document is applicable to both digital and analogue prints.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

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

3.1
ambient conditions
environmental conditions of (23 ± 1) °C and (50 ± 5) % RH

3.2
mordant
substance that combines with a dye, used to fix it in a material

4 Categories of water resistance

4.1 General

The water resistance of a print is categorized into one of three categories, i.e. water resistant, moderately water resistant and not water resistant as defined in 4.2 to 4.4.

4.2 Water resistant

Water-resistant print is print that is not noticeably affected by exposure to liquid water.

NOTE No significant degradation of the colorant (bleeding, smearing, hue change), of the support (curl, cockle, delamination) or of the image surface (gloss changes, water rings, etc.) is found.

4.3 Moderately water resistant

A moderately water-resistant print is a print that exhibits some change or damage by water but is still considered usable for its intended application.

NOTE The damage can manifest itself as slight media curl, partial delamination along an edge, or ring-like watermarks due to gloss changes or a minor amount of colorant migration. This damage can be mitigated by the rapid removal of the water (careful blotting, shaking off the water, etc.).