



SLOVENSKI STANDARD
SIST ISO 18913:2022

01-maj-2022

Slikovni materiali - Trajnost - Slovar

Imaging materials - Permanence - Vocabulary

Matériaux pour l'image - Permanence - Vocabulaire

Ta slovenski standard je istoveten z: ISO 18913:2021

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ICS:

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37.040.20	Fotografski papir, filmi in fotografske plošče. Filmski zvitki	Photographic paper, films and plates. Cartridges

SIST ISO 18913:2022

en

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**Imaging materials — Permanence —
Vocabulary**

Matériaux pour l'image — Permanence — Vocabulaire

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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 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 18913:2012), which has been technically revised.

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Introduction

This document is one of a series dealing with the physical properties and stability of imaging materials.

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Imaging materials — Permanence — Vocabulary

1 Scope

This document establishes a vocabulary of terms and definitions used in respect of the permanence of imaging materials, related storage materials and digital storage media.

In most cases these terms and definitions are generic and are applicable to the entire imaging industry. For terms and definitions specific to particular applications, refer to industry standards. However, in some cases the definition of a term is still evolving and/or is used by different user groups in different ways. In this case a definition fit for use in Imaging Materials – Permanence work is given and a note to this effect is included.

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 <https://www.electropedia.org/>

3.1

abrasion

loss of material from a surface or deformation of a surface, with changes in gloss, colour, or density, due to frictional forces as a result of rubbing

Note 1 to entry: Surface deformations can result in changes in gloss and colour.

Note 2 to entry: See also *mar resistance* (3.122), *rub resistance* (3.186), *scuff* (3.190), *smudge* (3.201), and *wet rub* (3.238).

3.2

absolute humidity

mass of water vapour per unit volume of wet gas

Note 1 to entry: It is a measure of the amount of water present as part of the chemical analysis of the space, i.e., how much water is available for chemical activity.

Note 2 to entry: See also *dew point* (3.56) and *relative humidity* (3.181).

3.3

accelerated ageing

procedure to simulate normal ageing process by subjecting a product to *stresses* (3.216) that are more severe or more frequent than normal environmental or operational stresses, thus shortening the test period relative to the normal ageing period

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3.4

acid-free adhesive

adhesive material that does not release acidic species, such that the cold extraction pH is equal to or greater than the reference water minus 0,5 and less than 10,0

Note 1 to entry: ISO 18902 provides a cold extraction pH test method, which may be used to establish a specification for acid-free adhesive materials for intended photographic applications.

Note 2 to entry: An adhesive may contain acids, but the cold extraction pH test only measures acidic species released into water to determine pH.

3.5

acid-free paper or paperboard

paper or paperboard materials that do not release acidic species, such that the cold extraction pH is equal to or greater than the reference water minus 0,5 and less than 10,0

Note 1 to entry: ISO 18902 provides a cold extraction pH test method, which may be used to establish a specification for acid-free or alkaline paper and paperboard materials for intended photographic applications.

Note 2 to entry: A paper or paperboard may contain acids, but the cold extraction pH test only measures acidic species released into water to determine pH.

3.6

album

binder or book structure having front and back covers in which pages are bound along one edge either by plastic straps, gluing, sewing, metal posts or rings, and in which photographs are attached and related contents may be included

3.7

albumen plate

glass sheet bearing a silver halide/albumen layer which yields a visible image after exposure and processing

3.8

ambient conditions

conditions of the affecting environment

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Note 1 to entry: For *preservation* ([3.164](#)) purposes these may or may not be the same as the *storage environment* ([3.214](#)).

3.9

ambrotype plate

glass plate collodion positive, i.e. glass sheet bearing a thin silver halide/cellulose nitrate layer which yields a visible image after exposure and processing

Note 1 to entry: The processed *negative* ([3.134](#)) silver image appears as a positive when backed by a dark field.

3.10

analogue print

print where the image is printed from the analogue domain

Note 1 to entry: In graphic printing, the marking information of an analogue print is generated by means of an off-line produced forme with which the ink is printed on the media. Examples of traditional forme-based ink printing as defined in ISO 12637-1 are flexographic, letterpress, letterset, (offset) lithographic, gravure, intaglio, pad-transfer printing, screen, and stencil printing.

Note 2 to entry: Ambiguous use also for chromogenic (silver-halide) print, where image information is exposed conventionally (“analogue”) through a film *negative* ([3.134](#)) or positive, or actual scene images are exposed through camera lenses.

Note 3 to entry: See also *digital print* ([3.58](#)).

3.11**anti-blocking agent**

additive or component which prevents *sticking* (3.211) or fusing of adjacent surfaces

EXAMPLE Talc, silicates or matte beads.

Note 1 to entry: See ISO 18902.

Note 2 to entry: See *blocking* (3.20)

3.12**aperture card**

card of standard dimensions with one or more openings into which a microfilm frame or frames can be mounted or inserted

3.13**aperture window**

opening in the *flange* (3.80) of a cassette that is used to facilitate threading of magnetic tape on the *hub* (3.46) and inspection of the *wind* (3.240)

3.14**archival**

medium (3.124) that can be expected to preserve images at a stated level of quality or usefulness for a specified extended period of years

3.15**Arrhenius plot**

plot of the logarithm of the time for a given change in a characteristic proportional to the reaction rate versus the reciprocal of the temperature expressed in K (Kelvin)

Note 1 to entry: The Arrhenius plot can be used to predict behaviour at a temperature lower than that at which a test is run, as described in ISO 18924.

Note 2 to entry: Changes in characteristics may include dye loss, tensile strength change, D_{\min} (3.55) yellowing, etc.

3.16**artificial accelerated weathering****artificial weathering****laboratory weathering**

exposure of a material in a laboratory weathering device to conditions which may be cyclic and may be intensified compared with conditions encountered in outdoor or in-service exposure

Note 1 to entry: The purpose of artificial accelerated weathering is to accelerate changes in the material that can correspond to changes observed after long-term, continuous, natural or end-use exposure.

3.17**base**

support in a *recording material* (3.176) on which the image receiving/recording layers or magnetic layer (and, if necessary, the back layer) are coated

Note 1 to entry: *Substrate* (3.218) is the preferred term for the physical support of a receiving layer. The term 'base' should be used only in reference to pH.

3.18**blister**

localized *delamination* (3.54) of a multilayer assembly that looks like a bubble

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3.19

block error rate**BLER**

ratio of erroneous blocks to total blocks on an *optical disc* (3.142) measured at the input of the first (C1) decoder (before any error correction is applied)

Note 1 to entry: The more commonly reported value for BLER is the number of erroneous blocks per second measured at the input of the C1-decoder during playback at the standard (1X) data rate.

3.20

blocking

undesired adherence between sheets of printed material

Note 1 to entry: Blocking can occur under a variety of pressures, temperatures, and humidity conditions, while in storage or in use.

Note 2 to entry: Blocking effects include *delamination* (3.54), paper splitting, tearing, gloss changes, physical image transfer, permanent bonding to adjacent materials and prints, and edge deformation.

Note 3 to entry: See also *anti-blocking agent* (3.11).

3.21

blue print

defect resulting from a drastic reduction in the light stability of the yellow dye in a *chromogenic print* (3.32)

Note 1 to entry: Be aware that “blue print” is not to be confused with “blueprint”.

Note 2 to entry: A common cause in the case of a blue print is when a print has been lacquered in a very humid environment or was not thoroughly dried before lacquering.

3.22

book printing

printing of books and publishing of monographs (reference books, photo-books, comic, paperback, textbooks and directories)

Note 1 to entry: See also *commercial printing* (3.38), *newspaper and periodical printing* (3.135), *package printing* (3.146), *sign printing* (3.195), and *transactional and direct mail printing* (3.228).

3.23

brittleness

property of a material that causes it to crack or break when deformed by bending or flexing

3.24

buffered

<paper> characteristic of paper or paperboard materials containing a certain amount of alkali reserve to neutralize future attacks by acidic species, either from atmospheric pollutants or released from material degradations in the ageing process

Note 1 to entry: See ISO 10716 for a standard test method to determine the amount of alkaline reserve in paper materials.

Note 2 to entry: See ISO 18902 for specifications for alkaline reserve in paper and paper boards for albums, framing, and storage materials.

3.25

can

<recording media> metal or plastic *container* (3.44) for a roll of *recording material* (3.176), such as photographic film or magnetic tape

3.26

carrier

<recording media> *medium* (3.124) upon which information is recorded