BS ISO 18934:2011

BSI Standards Publication

Imaging materials — Multiple media archives — Storage environment

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National foreword

This British Standard is the UK implementation of ISO 18934:2011. It supersedes BS ISO 18934:2006 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CPW/42, Photography.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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INTERNATIONAL STANDARD

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Imaging materials — Multiple media archives — Storage environment

Matériaux pour l'image — Archives multimédia — Environnement de stockage

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 18934 was prepared by Technical Committee ISO/TC 42, *Photography*.

This second edition cancels and replaces the first edition (ISO 18934:2006), which has been technically revised.

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Introduction

Historically, technical committees ISO/TC 36 and ISO/TC 42 have published ISO storage standards specific to individual materials. Many of these temperature and relative humidity recommendations are based on laboratory studies using Arrhenius type projections that allow extrapolation of high temperature incubation tests to recommended storage environments at reduced temperatures. This also allows a prediction of the life expectancy of materials. This approach and the resulting analysis are logical when each medium is considered by itself. The individual ISO storage standards are sound and the predicted life expectancies have been consistent with practical experience. However, the storage conditions can differ widely for various media and reflect differences in their inherent stability. The extended-term storage conditions recommended in the various standards provide wide humidity ranges and set only a maximum temperature limit with considerable overlap in allowed environmental conditions across several media types.

In the real world, archivists and curators frequently are faced with the task of storing many types of material, such as film, prints, tapes, etc. Archives often contain media that cannot be separated without destroying the integrity of the collection. In other archives, one collection can consist primarily of one medium, but there are many collections each with different media. In either situation, it might not be practical or realistic for the archivist to provide a number of different storage environments that are optimized for each material. The cost and inconvenience would be prohibitive; moreover, records of the same or similar subject matter are usually stored in close proximity to facilitate reference, not by the type of medium. The archivist of a multiple media collection might be forced to limit the number of storage environments that can be provided. In some cases, this means some deviation from the ISO storage recommendations and can compromise the life expectancies specified in the standards. This compromise can be based on the value, physical size, quantity, or legal requirements to maximize life expectancy of some collections relative to others.

This International Standard provides an assessment of the keeping qualities for four storage environments. As such, it is most useful for storage facilities that house different types of materials, but does not override the ISO recommendations for single medium collections.

Institutions with substandard environments and restricted budgets are encouraged to plan for the improvement of these environments as resources allow by judicious use of air conditioning, dehumidifiers (or humidifiers), air circulation and filtration. Although practicalities can force compromises, any improvement of poor conditions will add to the longevity of materials, even if they do not attain the life expectancies possible with the environments recommended in the ISO standards. Basic air conditioning principles, the various options and the associated costs are not addressed in this International Standard. There are many references on this subject.

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