

Australian Standard<sup>®</sup>

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**Storage of microfilm**

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This Australian Standard was prepared by Committee MS/4, Micrographics Equipment and Techniques. It was approved on behalf of the Council of Standards Australia on 23 January 1989 and published on 21 July 1989.

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The following interests are represented on Committee MS/4:

Australian Archives  
Australian Bankers Association  
Australian Government Publishing Service  
Confederation of Australian Industry  
Department of Computing and Information Technology  
Department of Defence  
Department of Administrative Services  
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## PREFACE

This Standard was prepared by Standards Australia's Committee on Micrographics Equipment and Techniques, in response to a proposal received from the Defence Standardization Committee. Although represented on the Committee, Australian Archives did not support the adoption of this Standard.

The Standard includes measures to be taken for short-term storage, medium-term storage, and archival storage of processed black-and-white microfilm and prescribes the general care to be taken for storing microfilm.

Appendices describing test methods for the determination of characteristics, relevant to the preservation of the film used, are also provided.

During the preparation of the Standard, the following documents were consulted:

### ISO

417—1977 *Photography—Determination of thiosulphate and other residual chemicals in processed photographic films, plates and papers—Methylene blue photometric method and silver sulphide densitometric method*

2803—1974 *Photography—Silver-gelatin type microfilms—Processing and storage for archival purposes*

4331—1986 *Photography—Processed photographic black-and-white film for archival records—Silver-gelatin type on cellulose ester base—Specifications*

5466—1986 *Photography—Processed safety photographic film—Storage practices*

5626—1978 *Paper—Determination of folding endurance*

### BS

1153—1975 *Recommendations for the processing and storage of silver-gelatin-type microfilm*

Acknowledgement is made of the assistance received from these documents.

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## STANDARDS AUSTRALIA

**Australian Standard**  
**Storage of microfilm**

## SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This Standard specifies requirements for the storage and archival storage of processed black-and-white, silver-gelatin type, safety photographic microfilm which may be in the form of rollfilm, sheet-film, stripfilm, or image cards. It describes conditions for the storage and archival storage of such film, and includes procedures for the testing and handling of films.

NOTE: This Standard makes no provision for statistical sampling or quality control procedures for assessing the quality of microfilm. Where compliance with this Standard is to be assessed on the basis of statistical sampling and inspection, the sampling plan should be in accordance with AS 1199 and should take into account the guidance given in AS 1399.

**1.2 REFERENCED DOCUMENTS.** The following documents are referred to in this Standard:

AS	
1140	Definition of motion picture safety film
1152	Test sieves
1199	Sampling procedures and tables for inspection by attributes
1399	Guide to AS 1199, Sampling procedures and tables for inspection by attributes
1530	Methods for fire tests on building materials, components and structures
1530.4	Part 4: Fire resistance tests of elements of construction
1680	Code of practice for interior lighting and the visual environment
1717	Unitized microfilm carriers
2422	Glossary of micrographics terms
ISO	
417	Photography—Determination of thiosulphate and other residual chemicals in processed photographic film, plates and papers—Methylene blue photometric method and silver sulphide densitometric method
543	Cinematography—Motion-picture safety film—Definition, testing and marking
4331	Photography—Processed photographic black-and-white film for archival records—Silver-gelatin type on cellulose ester base—Specifications
ISO	
602	Paper—Determination of folding endurance
ANSI	
Z39.18	Photography (films)—Safety photographic film

**1.3 DEFINITIONS.** For the purpose of this Standard, the definitions given in AS 2422 and those below apply.

**1.3.1 Films.**

**1.3.1.1 Acetate film**—film with a base composed principally of cellulose acetate or triacetate.

**1.3.1.2 Archival record film**—photographic film composed and treated so that under optimum storage conditions it is suitable for preservation of records having permanent value.

**1.3.1.3 Duplicate film**—film copy generally made by a contact-printing process, continuously or frame-by-frame.

**1.3.1.4 Master film**—camera microfilm.

NOTE: Master film is also known as the original film.

**1.3.1.5 Safety film**—film which is difficult to ignite and which does not readily support combustion. (See AS 1140 and ANSI PH1.15.)

**1.3.2 Film base**—flexible or rigid plastics material coated with a light-sensitive image forming layer. This base may be either—

- (a) cellulose ester base—film base composed mainly of cellulose esters of acetic, propionic, or butyric acids, or a mixture thereof; or
- (b) polyethylene terephthalate base—film base composed mainly of a polymer of ethylene glycol and terephthalic acid.

**1.3.3 Film enclosures.**

**1.3.3.1 Containers**—insulated containers of the closed non-airtight or sealed airtight type.

**1.3.3.2 Enclosures**—film supports or containers such as boxes, reels, cores, spools, cassettes, magazines, cans, folders, envelopes, sleeves, transparency mounts, and image cards.

**1.3.4 Fire protection.**

**1.3.4.1 Fire protective storage**—storage facilities designed for protection of microfilm against water and other firefighting agents, excessive temperatures, steam, and structural collapses.

**1.3.4.2 Fire resistant vaults**—areas specifically designed to safeguard materials against damage caused by fires.

**1.3.5 Shall**—indicates that a statement is mandatory.

**1.3.6 Should**—indicates a recommendation.

**1.3.7 Storage.**

**1.3.7.1 Archival storage**—optimum microfilm storage conditions, suitable for records having permanent value.

NOTE: Archival storage is considered to be in excess of 100 years.

**1.3.7.2 Medium-term storage**—storage of microfilm for periods in excess of 10 years.

**1.3.7.3 Short-term storage**—easy access storage of microfilm for day-to-day use.

**1.3.7.4 Field storage**—storage for transporting microfilm used in various environments.