

PART 3

Data Dictionary of Preservation and Digitization Actions Terminology

Term	Definition	Usage
acquired surrogate	Acquisition of another copy through external sources in the same format or another format. Generally this occurs when the original copy is too brittle or damaged to reformat and a copy is available commercially. The replacement copy often provides access to the content of the original without regard to the original collation or other visual qualities. It is not always possible to control the quality of the surrogate. <i>Examples: reprint; microfilm use copy; replacement copy obtained through antiquarian market</i>	\$a
box	Custom-fitted board stock enclosure, preservation quality materials & construction, often used for rare book collections. May be cloth-covered. <i>Examples: clamshell box, phase box</i>	\$i, when \$a=housed
clean	The removal of substances that can be detrimental to the item. <i>Examples: surface or "dry" cleaning of flat paper using a soft brush or an erasing compound; vacuuming bound volumes using cheesecloth & HEPA filters; removal of dry-particulate debris, such as dirt, dust, or shedding binder, from videotapes using long-fiber, lint-free, non-abrasive tissues.</i>	\$i, when \$a=stabilized
cold storage	A technique for extending the life expectancy of materials by keeping them at a temperature below room temperature, thereby reducing the rate of deterioration.	
condition reviewed	The examination of items and the subsequent recording of their physical state under \$I (<i>Status</i>). May be used internally to record survey results and later retrieve items for a specific treatment. <i>Examples: alkaline paper, brittle, mutilated, rehoused poorly</i>	\$a
conserved	The act of preserving an item in its original format through chemical or physical treatment, often employing new materials. This action term is used to indicate that the owning institution has a copy in good condition following conservation treatment (also known as single-item treatment). The purpose of recording this information in a 583 note is to allow other libraries to elect <u>not</u> to perform extensive conservation treatment on their copy. It is not meant to replace in-house treatment documentation systems that record detailed descriptions. <i>Examples: washing, deacidification, stain removal, resewing, rebacking</i>	\$a
DEZ	Diethyl zinc, a mass deacidification process.	\$i, when \$a=mass deacidified or will mass deacidify

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Term	Definition	Usage
digital copy	Link established to a commercial database or other online resource.	\$i , when \$a =acquired surrogate or will acquire surrogate
digitized	Conversion of an analog (print or non-print) item to a digital format. Digitized is used to distinguish materials that have been transformed from the media in which they were created from materials that are born digital. Conversion should be completed using relevant standards (relative to the source material and end product) though adherence to any such standard is not recorded within the 583. This information should be considered local information and recorded in the metadata about the digital object or may be made accessible through a link (\$u) to further information which exists outside of the OPAC. <i>Examples: a scanned photograph; an audiocassette reformatted to a digital audio file; a microfilm copy converted to digital form</i>	\$a
double-keyed	Rekeying/retyping by more than one data entry operator, with subsequent automated comparison and error detection/correction	\$i , when \$a =transformed digitally or will transform digitally
encapsulation	The process of placing a document between two sheets of polyester, which are sealed, to provide support and to protect it from handling and fluctuation in environmental conditions. It is a type of custom-fitted enclosure that uses preservation quality materials & construction. <i>Examples: often used for map or graphic image collections</i>	\$i , when \$a =housed
envelope/sleeve	Non-custom paper enclosure that uses preservation quality materials & construction. The sleeve or sling is a folded sheet of preservation quality material used to slide the item in and out of the envelope without mechanical damage to the item. <i>Example: often used for pamphlet collections</i>	\$i , when \$a =housed
facsimile	Generation of a paper copy from the original paper format (e.g., book, manuscript, map, plates) using the same collation as the original. A facsimile attempts to reproduce the visual and tactile qualities of the original. Requires adherence to preservation standards for paper quality and image permanence. Whole volumes are bound. A master copy of the digital intermediate may be retained.	\$i , when \$a =reproduced in print or will reproduce in print
facsimile publication	An exact reproduction of the original produced by a commercial source.	\$i , when \$a =acquired surrogate or will acquire surrogate

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folder/ container	Non-custom enclosure that uses preservation quality materials (card or board stock) & construction. The folder serves as a loose cover to keep documents and other flat materials together. Folders may be stored without containers in cabinet drawers (e.g., maps) or collected into groups for storage in flat containers or manuscript boxes. <i>Examples: often used for manuscript, map, or photographic print collections</i>	\$i, when \$a=housed
georectified	Process that assigns (Earth) surface coordinates to a map or aerial photograph.	\$i, when \$a=transformed digitally or will transform digitally
housed	The placement of an item in an enclosure (often custom-fitted) to maintain the item in pristine condition, provide better support for the item, and/or avoid a more invasive treatment. <i>Examples: encapsulation, clamshell boxes, sleeves & envelopes</i>	\$a
jacket	Custom-fitted paper enclosure, preservation quality materials & construction. <i>Examples: often used for microfiche or photonegative collections</i>	\$i, when \$a=housed
mass deacidified	Chemical neutralization of the acid in paper using a commercial, batched process. Generally leaves an alkaline reserve. <i>Example: documents in file folders within a manuscript box that have been treated in the Bookkeeper manuscript chamber</i>	\$a
METE	Magnesium ethoxide & titanium ethoxide, a mass deacidification process. <i>Example: Battelle</i>	\$i, when \$a=mass deacidified or will mass deacidify
methylen- blue test	A standard for determining the amount of residual thiosulfate ions remaining in gelatin silver film after processing.	
Mg3/MBG	Magnesium dibutoxytriethylene glycoate/Magnesium butyl glycoate, a mass deacidification process. <i>Example: FMC</i>	\$i, when \$a=mass deacidified or will mass deacidify
MgO	Magnesium oxide, a mass deacidification process. <i>Example: Bookkeeper</i>	\$i, when \$a=mass deacidified or will mass deacidify
microfilm use copy	Commercially produced microfilm or a use copy generated from a preservation master owned by another institution.	\$i, when \$a=acquired surrogate or will acquire surrogate
microfilmed	Conversion of an original paper copy to silver halide microfilm. Presumes preservation quality in preparation for filming, film processing, and storage. Microfiche is not considered a preservation medium and is <u>not</u> included in this definition. <i>Example: 35mm polyester-based microfilm</i>	\$a

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MMMC	Methoxy magnesium methylcarbonate, a mass deacidification process. <i>Example: Wei T'o</i>	\$i, when \$a=mass deacidified or will mass deacidify
OCR	Optical character recognition, the process of transforming images of characters in a document to the equivalent ASCII code for those characters.	\$i, when \$a=transformed digitally or will transform digitally
other	Action term used when a standard term is not available. Record action using natural language in \$x (non-public note) or \$z (public note). This will be necessary more often with non-print formats for which a standard terminology has not yet been established.	\$a
output from digital file	Production in paper form of text and images from a digital file. Requires adherence to preservation standards for paper quality & image permanence. Whole volumes are bound. Output is <u>not</u> a facsimile of an original paper copy.	\$i, when \$a=reproduced in print or will reproduce in print
output from microfilm	Production in paper form of text and images from microfilm, often with two-up pagination. Requires adherence to preservation standards for paper quality & image permanence. Whole volumes are bound. Output is <u>not</u> a facsimile of an original paper copy.	\$i, when \$a=reproduced in print or will reproduce in print
photographic activity test	Standard used to test for potential chemical reaction between the materials used to make enclosures and photographs stored in them.	
polysulfide	Treatment for microfilm, which greatly retards damage from pollutants. Polysulfide treatment can be used during initial processing of film or for film already processed.	\$i, when \$a= microfilmed
rebound	Replacement of original covers through library binding or recasing. Original leaf attachment may or may not be retained. <i>Example: a hardcover volume which receives a new buckram cover</i>	\$a
repaired	In-house treatment for circulating collections to allow for quick turnaround and the retention of original signatures & covers. <i>Example: spine repair</i>	\$a
reprint	A commercial paper copy reissued by the publisher.	\$i, when \$a=acquired surrogate or will acquire surrogate
reproduced in analog	The copying of an analog audio or video item to a new analog (non-digital) media format. <i>Example: audio cassette ro reel-to-reel tape preservation reformatting</i>	\$a

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Term	Definition	Usage
reproduced in print	Generation of a paper copy from the original, or from a microfilm or digital copy. Requires adherence to preservation standards for paper quality and image permanence. Whole volumes are bound. <i>Examples: a paper copy printed from a digital file and bound; a map printed from a digital file; a “preservation photocopy”</i>	\$a
request review	Identification of items in need of attention without removing them from circulation. Used primarily by non-preservation staff without the experience or authority to make a specific treatment decision. This option allows items to be identified without creating a physical backlog for preservation treatment. Selection for treatment can then be managed by generating lists from the online catalog, prioritizing by factors such as high-use subject areas, type of treatment, or earliest date. <i>Examples: a book with blocked pages due to previous water damage; a mutilated volume</i>	\$a
retained	Generally used to describe the disposition of the original when replacing or reformatting an item. <i>Example: plates retained from a discarded brittle volume</i>	\$a
shrink-wrap	A protective covering, often temporary, consisting of a clear polyethylene or other chemically stable film wrapped around the item, then shrunk by heat to form a sealed, tight-fitting package.	\$i, when \$a=stabilized
stabilized	Non-invasive procedures used to minimize deterioration and maintain the integrity of an item. In many cases, stabilization provides support to an item as an interim or phased approach to treatment. <i>Examples: clean; tie with flat string; shrink-wrap</i>	\$a
text markup	The process of adding codes to a digital document to give semantic structure to the content. <i>Examples: XML, TEI, EAD</i>	\$i, when \$a=transformed digitally or will transform digitally
transferred to optimal storage	Placement of an item in an environment that meets preservation standards for relative humidity, temperature, light exposure, air quality, and emergency preparedness for the housing of that material type. <i>Example: transfer to a newly constructed off-site storage facility designed to preservation specifications</i>	\$a
transformed digitally	Copying, converting, or enhancing a digital file resulting in the production of another digital file. <i>Examples: Post-processing of files such as OCR, text encoding, or geo-rectifying; digital preservation activities such as migration from one digital format to another or emulation of a digital format.</i>	\$a
tie	Use of a flat cotton “tape” wrapped around an item to support loose components.	\$i, when \$a=stabilized

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Term	Definition	Usage
will acquire surrogate	See “acquired surrogate.”	\$a
will conserve	See “conserved.”	\$a
will digitize	See “digitized.”	\$a
will mass deacidify	See “mass deacidified.”	\$a
will microfilm	See “microfilmed.”	\$a
will not conserve	See “conserved.”	\$a
will not digitize	See “digitized.”	\$a
will not mass deacidify	See “mass deacidified.”	\$a
will not microfilm	See “microfilmed.”	\$a
will not reproduce in analog	See “reproduced in analog.”	\$a
will not reproduce in print	See “reproduced in print.”	\$a
will not transform digitally	See “transformed digitally.”	\$a
will reproduce in analog	See “reproduced in analog.”	\$a
will reproduce in print	See “reproduced in print.”	\$a
will transform digitally	See “transformed digitally.”	\$a
withdrawn	Removal of an item or portion of an item from the collection. <i>Example: brittle text withdrawn</i>	\$a

Appendix A: Relevant Standards and Guidelines

1. \$a action = “digitized” or “will digitize”

ISO 3664: 2000 *Viewing conditions -- Graphic technology and photography*. Geneva, Switzerland: International Organization for Standardization, 2000.

ISO 12233: 2000 *Photography - Electronic still picture cameras - Resolution measurements*. Geneva, Switzerland: International Organization for Standardization, 2000.

ISO 14524: 1999 *Photography - Electronic still picture cameras- Methods for measuring opto-electronic conversion functions (OECFs)*. Geneva, Switzerland: International Organization for Standardization, 1999.

ISO 15739: 2003 *Photography - Electronic still-picture imaging - Noise measurements*. Geneva, Switzerland: International Organization for Standardization, 2003.

ISO 16067-1: 2003 *Photography - Electronic scanners for photographic images – Spatial resolution measurements – Part 1: Scanners for reflective media*. Geneva, Switzerland: International Organization for Standardization, 2003.

ISO 16067-2: 2004 *Photography - Electronic scanners for photographic images – Spatial resolution measurements – Part 2: Film scanners*. Geneva, Switzerland: International Organization for Standardization, 2004.

ISO 18906: 2000 *Imaging Materials – Photographic films – Specifications for safety film*. Geneva, Switzerland: International Organization for Standardization, 2000.

ISO 21550: 2004 *Photography - Electronic scanners for photographic images – Dynamic range measurements*. Geneva, Switzerland: International Organization for Standardization, 2004.

Digital Library Federation/Research Libraries Group/Council on Library and Information Resources. *Guides to Quality in Visual Resource Imaging*. Washington, DC: CLIR, 2000.

Research Libraries Group. *Moving Theory Into Practice*. Mountain View, CA: RLG, 2000.

Institute of Museum and Library Services. *A Framework of Guidance for Building Good Digital Collections*. Washington, DC: IMLS, 2001.
<http://www.diglib.org/standards/imlsframe.htm>

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Digital Library Federation. *Benchmark for Faithful Digital Reproductions of Monographs and Serials*. DLF, 2002.

<http://www.diglib.org/standards/bmarkfin.htm>

2. **\$a action = “housed”**

ANSI/AIIM MS11-1987 *Microfilm Jackets*. Silver Spring, MD: Association for Information and Image Management, 1987.

ANSI/NISO Z39.77-2001 *Guidelines for Information about Preservation Products*. Bethesda, MD: NISO, 2001.

ISO 14523: 1999 *Photography – Processed photographic materials - Photographic activity test for enclosure materials*. Geneva, Switzerland: International Organization for Standardization, 1999.

ISO 18902: 2001 *Imaging materials — Processed photographic films, plates and papers — Filing enclosures and storage containers*. Geneva, Switzerland: International Organization for Standardization, 2001.

Library of Congress. *Preservation Specifications and Supply Catalogue*. Washington, DC: Library of Congress, 2003. <http://www.loc.gov/preserv/supply/specific.html>

National Archives and Records Administration. *Specifications for Housing Enclosures for Archival Records*. Washington DC: NARA, 1991-1996.
http://www.archives.gov/preservation/storage/nara_housing_enclosure_specifications.html

3. **\$a action = “microfilmed” or “will microfilm”**

ANSI/AIIM MS14-1996 *Specifications for 16 and 35mm Roll Microfilm*. Silver Spring, MD: Association for Information and Image Management, 1996.

ANSI/AIIM MS18-1992 (R1998) *Splices for Image Film: Dimensions and Operational Constraints Microfilm*. Silver Spring, MD: Association for Information and Image Management, 1998.

ANSI/AIIM MS35-1990 *Recommended Practice for the Requirements and Characteristics of Original Documents That May Be Microfilmed*. Silver Spring, MD: Association for Information and Image Management, 1990.

ANSI/AIIM MS37-1998 (R1996) *Recommended Practice for Microphotography of Cartographic Materials*. Silver Spring, MD: Association for Information and Image Management, 1996.

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- ISO 6200: 1999 *Micrographics – First generation silver-gelatin microforms of source documents – Density specifications and method of measurement*. Geneva, Switzerland: International Organization for Standardization, 1999. Related to **ANSI/AIIM MS23-1998** *Practice for Operational Procedures/ Inspection and Quality Control of First-Generation Silver-Gelatin Microfilm of Documents*. Silver Spring, MD: Association for Information and Image Management, 1998.
- ISO 8126: 2000 *Micrographics – Duplicating film, silver, diazo and vesicular – Visual density – Specifications and measurement*. Geneva, Switzerland: International Organization for Standardization, 2000. Related to **ANSI/AIIM MS43-1998** *Operational Procedures/Inspection and Quality Control of Duplicate Microforms of Documents and From COM*. Silver Spring, MD: Association for Information and Image Management, 1998.
- ISO 11906: 1999 *Microfilming of serials – Operating procedures*. Geneva, Switzerland: International Organization for Standardization, 1999.
- ISO 12031: 2000 *Micrographics – Inspection of silver-gelatin microforms for evidence of deterioration*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18901: 2002 *Imaging materials — Processed silver-gelatin type black-and-white films - Specifications for stability*. Geneva, Switzerland: International Organization for Standardization, 2002.
- ISO 18917: 1999 *Photography — Determination of residual thiosulfate and other related chemicals in processed photographic materials — Methods using iodine-amylose, methylene blue and silver sulfide*. Geneva, Switzerland: International Organization for Standardization, 1999.
- RLG Preservation Microfilming Handbook*. Mountain View, CA: RLG, 1992.
- RLG Archives Microfilming Manual*. Mountain View, CA: RLG, 1994.
- RLG Guidelines for Microfilming to Support Digitization: supplement to RLG Microfilming Publications*. Mountain View, CA: RLG, 2003.

4. \$a action = “rebound”

- ISO 14416: 2003 *Information and documentation – Requirements for binding of books, periodicals, serials and other paper documents for archive and library use – Methods and materials*. Geneva, Switzerland: International Organization for Standardization, 2003. Related to **ANSI/NISO/LBI Z39.78-2000** *Library Binding*.

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5. **\$a action = “reproduced in analog” or “will reproduce in analog”**

ISO/DIS 18909 *Photography – Processed photographic colour films and paper prints – Methods for measuring image stability*. Geneva, Switzerland: International Organization for Standardization.

6. **\$a action = “reproduced in print” or “will reproduce in print”**

ISO 9706: 1994 *Information and documentation – Paper for documents – Requirements for permanence*. Geneva, Switzerland: International Organization for Standardization, 1994. Related to **ANSI/NISO Z39.48-1992 (R1997)** *Permanence of Paper for Publications and Documents in Libraries and Archives*.

ISO 11108: 1996 *Information and documentation – Archival paper – Requirements for permanence and durability*. Geneva, Switzerland: International Organization for Standardization, 1996.

ISO 11798: 1999 *Information and documentation – Permanence and durability of writing, printing and copying on paper – Requirements and test methods*. Geneva, Switzerland: International Organization for Standardization, 1999.

Jones, Norvell M. M. *Archival Copies of Thermofax, Verifax, and Other Unstable Records*. Technical Information Paper no. 5. Washington DC: National Archives and Records Administration, 1990.
http://www.archives.gov/preservation/archival_formats/paper_and_parchment.html#thermofax.html

Library of Congress. *Preservation photocopying*. Washington DC: LC (undated).
<http://www.loc.gov/preserv/care/photocopy.html>

7. **\$a action = “stabilized”**

ISO/DIS 18933 *Imaging Materials – Magnetic tape – Care and handling practices for extended usage*. Geneva, Switzerland: International Organization for Standardization.

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8. \$a action = “transferred to optimal storage”

- ISO 11799: 2003 *Information and documentation — Document storage requirements for archive and library materials*. Geneva, Switzerland: International Organization for Standardization, 2003.
- ISO 18911: 2000 *Imaging Materials – Processed safety photographic films – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18918: 2000 *Imaging Materials – Processed photographic plates – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18920: 2000 *Imaging Materials – Processed photographic reflection prints – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18921: 2002 *Imaging Materials – Compact discs (CD-ROM) – Method for estimating the life expectancy based on the effects of temperature and relative humidity*. Geneva, Switzerland: International Organization for Standardization, 2002.
- ISO 18923: 2000 *Imaging Materials – Polyester-base magnetic tape – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18924: 2000 *Imaging Materials – Test method of Arrhenius-type predictions*. Geneva, Switzerland: International Organization for Standardization, 2000.
- ISO 18925: 2002 *Imaging Materials – Optical disc media – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2002.
- ISO 18928: 2002 *Imaging Materials – Unprocessed photographic films and papers – Storage practices*. Geneva, Switzerland: International Organization for Standardization, 2002.
- ISO 18929: 2003 *Imaging Materials – Wet processed silver-gelatin type black-and-white photographic reflection prints – Specifications for dark storage*. Geneva, Switzerland: International Organization for Standardization, 2003.
- ISO/TR18931: 2001 *Imaging Materials – Recommendations for humidity measurement and control*. Geneva, Switzerland: International Organization for Standardization, 2001.

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ISO/DIS 18934 *Imaging Materials – Multiple media archives – Storage environment*. Geneva, Switzerland: International Organization for Standardization.

Adelstein, Peter Z. *IPI Media Storage Quick Reference*. Rochester, NY: Image Permanence Institute, 2004.

Lull, William P., and Linda Merk. "Lighting for Storage of Museum Collections: Developing a System for Safekeeping of Light-Sensitive Materials." *Technology & Conservation* vol. 7, no. 2 (Summer 1982): 20-25.

Michalski, Stephan. *Guidelines for Humidity and Temperature for Canadian Archives*. Ottawa, Ontario, Canada: Canadian Conservation Institute, 2000. (CCI Technical Bulletin No. 23)

National Bureau of Standards (NBS). *Air Quality Standards for Storage of Paper-Based Archival Records*. BNSTR 83-2795. Gaithersburg, MD: NBS, 1983.

National Information Standards Organization. *Environmental Guidelines for the Storage of Paper Records*. Technical Report. NISO-TR01-1995.

Reilly, James M. *Storage Guide for Color Photographic Materials*. Rochester, NY: Image Permanence Institute, 1998.

Reilly, James M., Douglas W. Nishimura, and Edward Zinn. *New Tools for Preservation/Assessing Long-Term Environmental Effects on Library and Archives Collections*. Washington, DC: Commission on Preservation and Access, 1995.

9. \$a action = "other"

Northeast Document Conservation Center. *Preservation of Library & Archival Materials: A Manual*. Edited by Sherelyn Ogden. Andover, MA: NEDCC, 1999.

RLG Magnetic Media Preservation Manual. Mountain View, CA: RLG [in preparation].