
International Standards on Image Permanence

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ISO Standards

- ISO photographic standards
- Image Permanence work
 - “Traditional” media
 - Optical discs
 - “New” print media
- Further information
 - <http://www.rps-isg.org>

ISO photographic standards

- Technical Committee 42 – Photography
- 177 standards, 32 countries
- UK input coordinated by BSI CPW/42
- 19 Working Groups
- Working Group 5
 - Physical properties and image permanence of photographic materials

Image Permanence work

- ISO189xx range held open by ISO
 - Old standards renumbered on 5 year review
 - Currently working on 18948!
- Standards covering
 - Traditional and new image storage media
 - Storage practices
 - Test methods
 - Specifications for stability

Traditional photographic media

- Specifications for stability
 - Processed mono films (18901:2002)
 - Presently under revision led from the UK
 - Processed diazo films (18905:2005)
 - Processed vesicular films (18912:2005)
 - Processed silver based microfilm (18919:1999)
 - Dark storage of monochrome prints (18929:2003)

Traditional photographic media

- Storage practices
 - Processed photographic films (18911:2000)
 - Presently under revision led from the UK
 - Glass plates (18918:2000)
 - Processed reflection prints (18920:2000)
 - Presently under revision led from the US
 - Unprocessed films and papers (18928:2002)
 - Multiple media archives (18934:2006)

Enclosures (frames, folders etc.)

- Photographic products (18902:2007)
 - Filing enclosures and storage containers
- Adhesive mounting systems (18932:2005)
- Photographic activity test for enclosure materials (18916:2007)
- Continued work in this area
 - Photobooks

Test methods

- Physical and chemical properties
 - Dimensional change (18903:2002)
 - Brittleness (18907:2000)
 - Curl (18910:2000)
 - Wet abrasion (18914:2002)
 - Silver oxidation (18915:2000)
 - Scratch resistance (18922:2003)
- Accelerated ageing
 - Arrhenius-type predictions (18924:2000)

Media for electronic storage

- Storage practices
 - Magnetic tape (18923:2000)
 - Optical disc (18925:2002)
 - Magnetic hard drives (NP 18943)
- Care and handling
 - Optical discs (ISO 18938:2008)
- Estimating life expectancy
 - CD-ROM (18921:2002)
 - CD-R (18927:2002)
 - Magneto-optical discs (18926:2006)

“New” media – inkjet, D2T2 etc

- More complex failure routes than photo
- Test methods
 - Light (18937)
 - Pollutants (18941)
 - Thermal (NP 18936)
 - Humidity (NP 18946)
- Test target (NP 18944)
- Print life specification (NP 18940)

Sources of information

- <http://www.rps-isg.org>
- <http://pgs.iop.org>
- Conference papers
 - Preservation & Conservation issues related to Digital Printing & Digital Photography
 - Int. Congress of Imaging Science (ICIS)
 - NIP (<http://www.imaging.org/conferences/>)
 - Archiving (<http://www.imaging.org/conferences/>)
- Image Permanence Institute at RIT