

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

First edition
2000-04-01

Micrographics — Inspection of silver-gelatin microforms for evidence of deterioration

Micrographie — Inspection des microformes en argent-gélatine pour mise en évidence de détérioration



Reference number
ISO/TR 12031:2000(E)

© ISO 2000

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword.....	v
Introduction	vi
1 Scope	1
2 References.....	1
3 Terms and definitions	1
4 Inspection conditions.....	2
5 Equipment and supplies	2
5.1 General.....	2
5.2 Light box and film rewinds for 16 mm and 35 mm film.....	2
5.3 Eye loupe (eye glass)	2
5.4 Microscope.....	2
5.5 Specular light source	2
5.6 Black velvet	2
5.7 Inspection gloves.....	2
6 Sampling method.....	3
6.1 General.....	3
6.2 Division into survey groups	3
7 Inspection procedures	3
7.1 General.....	3
7.2 Procedure for all microforms	3
7.3 Checks for all microforms	3
7.4 Additional checks for roll film	4
7.5 Additional checks for jackets	4
7.6 Additional checks for aperture cards	4
8 Inspection reporting	4
8.1 Classification.....	4
8.2 Data collection, general	5
8.3 History and description of group or collection	5
8.4 Individual microform inspection report.....	6
8.5 Data analysis (optional)	6
9 Types of defects.....	7
9.1 General.....	7
9.2 Microbiological growths	7
9.3 Redox blemishes	8
9.4 Residual processing chemicals	8

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

9.5	Emulsion adhesion	9
9.6	Separation of the emulsion from the film base.....	9
9.7	Brittleness.....	9
9.8	Base shrinkage	9
10	Remedial action	9
10.1	General.....	9
10.2	Subsequent re-inspections.....	10
Annex A Determination of base type		11
Annex B Factors affecting deterioration		12
B.1	General.....	12
B.2	Inappropriate choice of film material	12
B.3	Processing.....	12
B.3.1	Improper fixing.....	12
B.3.2	Improper washing	12
B.3.3	Insufficient drying.....	12
B.4	Improper climatic conditions during storage	12
Annex C Examples of types of defects.....		13
C.1	Microbiological growths.....	13
C.2	Redox blemishes	14
C.2.1	Exposed leader	15
C.2.2	Silver sheen	15
C.3	Separation of the emulsion from the film base.....	16

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

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 3.

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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this Technical Report may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 12031 was prepared by Technical Committee ISO/TC 171, *Document imaging applications*, Subcommittee SC 1, *Quality*.

This is a preview of "ISO/TR 12031:2000". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The purpose of this Technical Report is to provide a uniform method of selecting and inspecting silver-gelatin microforms for evidence of deterioration. Improper processing, handling, and storage conditions have long been known to promote biological attack and various other kinds of image degradation. Examination of some large collections of microfilmed records within the last decade has revealed a number of instances of spot blemishes. This may be influenced by the number of years and by the number of different processing conditions used. These instances serve to focus attention on the fact that, although film may be processed and stored in the best available conditions, the only assurance that such records are being well maintained is a systematic programme of careful inspection. Silver-gelatin microforms which have been manufactured, exposed, developed, and stored according to existing standards and which have a long life expectancy may not require extensive inspection.