INTERNATIONAL STANDARD



Fourth edition 1997-12-01

Photography — Processed photographic plates — Storage practices

Photographie — Plaques photographiques développées — Directives pour l'archivage



Reference number ISO 3897:1997(E)

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.

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.

International Standard ISO 3897 was prepared by Technical Committee ISO/TC 42, *Photography*.

This fourth edition cancels and replaces the third edition (ISO 3897:1992), of which it constitutes a technical revision.

Annexes A to H and J of this International Standard are for information only.

© ISO 1997

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 the publisher.

International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland Internet central@iso.ch X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

Introduction

Photographic plates on glass or metal supports have been in existence almost since the beginning of photography. They have become increasingly important as documentary and pictorial reference material in archives, libraries, government, commerce and academia.

The stability and useful life of processed photographic plates depends on their physical and chemical properties, as well as on the conditions under which they are stored and used. This International Standard provides recommendations on proper storage conditions and practices. Although it is difficult to distinguish between the various types of plates covered by the definitions (see 3.7 to 3.7.8) with respect to storage life, the recommendations may be applied to all processed photographic plates.

The important storage elements affecting the preservation of processed photographic plates are as follows:

- relative humidity and temperature of the storage environment;
- hazards of fire, water, and light exposure;
- fungal growth;
- contact with certain chemicals in solid, liquid, or gaseous form;
- physical damage.

The extent to which relative humidity and temperature, or variations of both, can be permitted to reach beyond recommended limits without producing adverse effects will depend upon the duration of exposure, on biological conditions conducive to fungal growth, and on the accessibility of the atmosphere to the surfaces.

The term "archival" is no longer specified to express longevity or stability in International Standards on image materials since it has been interpreted to have many meanings, ranging from preserving information "forever", which is unattainable, to temporary storage of actively used materials.

This International Standard defines two levels of recommended storage conditions: medium-term and extended-term. Medium-term storage conditions can be used to preserve plates for a minimum of 10 years. Extended-term storage conditions will prolong the life of all plates, even those not optimized for permanence.

The space requirements and costs for establishing and operating the two levels of storage conditions (medium-term and extended-term) differ significantly. Furthermore, the specified limits of temperature and relative humidity for both sets of storage conditions may not be realizable due to budgetary constraints, energy considerations, climatic conditions, building construction, etc. However, it must be recognized that temperatures and relative humidities which are higher than the specified conditions will