INTERNATIONAL STANDARD

ISO 10349-12

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Photography — Photographic-grade chemicals — Test methods —

Part 12: Determination of density

Photographie — Produits chimiques de qualité photographique — Méthodes d'essai —

Partie 12: Détermination de la masse volumique

Reference number
ISO 10349-12:1992(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 10349-12 was prepared by Technical Committee ISO/TC 42, *Photography*.

ISO 10349 consists of the following parts, under the general title *Photography — Photographic-grade chemicals — Test methods*:

— *Part 1: General*

— *Part 2: Determination of matter insoluble in water*

— *Part 3: Determination of matter insoluble in ammonium hydroxide solution*

— *Part 4: Determination of residue after ignition*

— *Part 5: Determination of heavy metals and iron content*

— *Part 6: Determination of halide content*

— *Part 7: Determination of alkalinity or acidity*

— *Part 8: Determination of volatile matter*

— *Part 9: Reaction to ammoniacal silver nitrate*

— *Part 10: Determination of sulfide content*

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Case Postale 56 • CH-1211 Genève 20 • Switzerland
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— *Part 11: Determination of specific gravity*

— *Part 12: Determination of density*

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Photography — Photographic-grade chemicals — Test methods —

Part 12:
Determination of density

1 Scope

This part of ISO 10349 specifies a general test method for the determination of the density of solutions used in photographic processing.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 10349. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10349 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 10349-1:1992, *Photography — Photographic-grade chemicals — Test methods — Part 1: General.*

3 Hazards

See ISO 10349-1 for general hazard warnings for the handling of chemicals.

4 Apparatus

4.1 Density meter, capable of measuring density to 0,001 units.

4.2 Constant-temperature water-bath, with pump and heating system designed to maintain a circulating current and constant temperature (± 0,05 °C). The bath shall be deep enough to keep that part of the sample container which is filled with the sample below the surface of the water. The temperature of the bath shall be set at 25 °C.

5 Sampling

See ISO 10349-1.

6 Procedure

6.1 Calibration

Refer to the manufacturer's instruction manual for detailed instructions for calibration. Maintain calibration versus deionized or distilled water at 25 °C using a relative density value of 0,997 04.

6.2 Determination

Pour a test portion of 100 ml of the test sample into a clean dry container and place it in the water-bath (4.2). After the test portion has reached thermal equilibrium with the water-bath, measure the density using the density meter (4.1), following the manufacturer's instructions.