INTERNATIONAL STANDARD

ISO 787-14

Third edition
2019-03

General methods of test for pigments and extenders —

Part 14: Determination of resistivity of aqueous extract

Méthodes générales d'essai des pigments et matières de charge —
Partie 14: Détermination de la résistivité de l'extrait aqueux

Reference number
ISO 787-14:2019(E)

© ISO 2019

COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

 © ISO 2019 – All rights reserved

Contents

Page

© ISO 2019 – All rights reserved

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 256, *Pigments, dyestuffs and extenders.*

This third edition cancels and replaces the second edition (ISO 787-14:2002), which has been technically revised. The main changes compared to the previous edition are as follows:

— in Clause 3, a reference to ISO 18451-1 has been added;

— methanol as wetting agent has been replaced by ethanol;

— the former Clause 6 “Determination of cell constant” including Figure 1 has been replaced by Clause 7 “Preparation of conductivity meter”;

— the procedure has been replaced by a new method: it is no longer distinguished between hydrophilic and hydrophobic pigments;

— the text has been editorially revised and the normative references has been updated.

A list of all parts in the ISO 787 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

© ISO 2019 – All rights reserved

General methods of test for pigments and extenders —

Part 14:
Determination of resistivity of aqueous extract

1 Scope

This document specifies a general method of test for determining the electric resistivity (specific electric resistance) or the specific electric conductivity, respectively, of the aqueous extract of a pigment. The method is applicable to all pigments and extenders, except pigments that are soluble in water.

The resistivity of the aqueous extract of a pigment is considered as a property independent of the amount of water-soluble matter. If agreed, a cold extraction method can be used.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

ISO 18451-1, *Pigments, dyestuffs and extenders — Terminology — Part 1: General terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18451-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Reagents

4.1 Water, specific resistivity not less than 2 500 Ω · m or specific conductivity below 4 µS/cm, respectively.

4.2 Ethanol, specific resistivity preferable not less than 2 500 Ω · m or specific conductivity below 4 µS/cm, respectively.

4.3 Conductivity calibration solution (e.g. potassium chloride)**.**

5 Apparatus

5.1 Centrifuge, or ultra-centrifuge, if necessary.

5.2 Filter paper, fine textured.

© ISO 2019 – All rights reserved