



FINAL DRAFT International Standard

ISO/FDIS 877-1

Plastics — Methods of exposure to solar radiation —

Part 1: General guidance

Plastiques — Méthodes d'exposition au rayonnement solaire —

Partie 1: Lignes directrices générales

ISO/TC 61/SC 6

Secretariat: DIN

Voting begins on:
2025-05-22

Voting terminates on:
2025-07-17

ISO/FDIS 877-1

<https://standards.iteh.ai/catalog/standards/iso/b7a84848-cf3b-476e-93f7-e0db5ac855cd/iso-fdis-877-1>

ISO/CEN PARALLEL PROCESSING

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO/FDIS 877-1

<https://standards.iteh.ai/catalog/standards/iso/b7a84848-cf3b-476e-93f7-e0db5ac855cd/iso-fdis-877-1>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Principle	2
5 Apparatus	3
5.1 General requirements	3
5.2 Apparatus for measurement of climatic factors	3
5.2.1 Apparatus for measurement of radiant exposure	3
5.2.2 Other climate-measuring instruments	4
6 Test specimens	5
6.1 Form, shape and preparation	5
6.2 Number of test specimens	5
6.3 Conditioning and storage	6
7 Conditions of exposure of the test specimens	6
7.1 Classes of climate	6
7.2 Types of exposure used for specimens	6
8 Exposure stages	7
8.1 General considerations	7
8.2 Duration of exposure	7
8.3 Solar radiant exposure	7
8.3.1 Importance	7
8.3.2 Instrumental measurement of solar radiant exposure	7
9 Procedure	8
9.1 Mounting of test specimens	8
9.2 Mounting of reference materials	8
9.3 Climatic observations	9
9.4 Exposure of test specimens	9
9.5 Determination of changes in properties, if required	9
10 Expression of results	9
10.1 Determination of changes in properties	9
10.2 Levels (values) of exposure stages	9
10.3 Climatic conditions	9
11 Test report	10
Annex A (informative) Classification of climates	12
Bibliography	14

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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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

For an explanation of 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: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 877-1:2009), which has been technically revised.

The main changes are as follows:

- addition of new term and definition (3.1) "natural weathering";
- addition of a requirement for the area beneath and in the vicinity of racks in 5.1;
- addition of new NOTE 2 in 9.2 referring to ISO/TR 19032;
- addition of information to be included in the test report (Clause 11).

A list of all parts in the ISO 877 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.