

This is a preview of "ISO 877-3:2018". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2018-04

Plastics — Methods of exposure to solar radiation —

Part 3: Intensified weathering using concentrated solar radiation

*Plastiques — Méthodes d'exposition au rayonnement solaire —
Partie 3: Exposition intensifiée par rayonnement solaire concentré*



Reference number
ISO 877-3:2018(E)

© ISO 2018

This is a preview of "ISO 877-3:2018". Click [here](#) to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

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

This is a preview of "ISO 877-3:2018". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Apparatus	2
6 Test specimens	3
7 Exposure conditions	3
7.1 Orientation of mirrors.....	3
7.2 Exposure site.....	4
7.3 Temperature control.....	4
7.4 Irradiance level.....	5
8 Exposure stages	6
8.1 General.....	6
8.2 Solar radiant exposure.....	6
8.2.1 Guidance for selection of the exposure stage.....	6
8.2.2 Instrumental measurement of solar radiant exposure.....	6
9 Procedure	7
9.1 Mounting of test specimens.....	7
9.2 Mounting of reference materials (if used).....	7
9.3 Climatic observations.....	7
9.4 Exposure of test specimens.....	7
9.4.1 General.....	7
9.4.2 Exposure cycles.....	7
9.4.3 Testing under glass.....	7
10 Expression of results	8
10.1 Determination of changes in properties.....	8
10.2 Climatic conditions and observations.....	8
10.2.1 General.....	8
10.2.2 Temperature.....	8
10.2.3 Relative humidity.....	8
10.2.4 Levels (values) of exposure stages.....	8
10.2.5 Precipitation.....	9
10.2.6 Time of wetness.....	9
10.2.7 Other observations.....	9
11 Test report	9
Bibliography	10

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 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

This second edition cancels and replaces the first edition (ISO 877-3:2009), which has been technically revised.

A list of all the parts in the ISO 877 series can be found on the ISO website.

This is a preview of "ISO 877-3:2018". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents concerning temperature control described in [7.3](#)

ISO takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ISO that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO. Information may be obtained from:

Atlas Material Testing Technology LLC
Intellectual Property
45601 North 47th Avenue
Phoenix, Arizona 85087, USA

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ISO shall not be held responsible for identifying any or all such patent rights.