

SLOVENSKI STANDARD
SIST-TP CEN ISO/TR 18486:2019
01-marec-2019

Nadomešča:
SIST-TP CEN ISO/TR 18486:2017

Polimerni materiali - Parametri za primerjanje sevalnega spektra laboratorijskega svetlobnega vira, ki se uporablja za simuliranje vremenskih vplivov, z referenčnim sončnim sevalnim spektrom (ISO/TR 18486:2018)

Plastics - Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance (ISO/TR 18486:2018)

iTeh STANDARD PREVIEW

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Kunststoffe - Berechnung der Qualitätsanpassung der spektralen Verteilung eines Sonnensimulators mit Bezug auf eine referenzspektrale Verteilung der Sonnenstrahlung (ISO/TR 18486:2018)

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Plastiques - Paramètres de comparaison de la distribution spectrale d'une source de lumière de laboratoire pour les applications de vieillissement et d'une distribution spectrale solaire de référence (ISO/TR 18486:2018)

Ta slovenski standard je istoveten z: CEN ISO/TR 18486:2018

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
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TECHNICAL REPORT

CEN ISO/TR 18486

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

December 2018

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Supersedes CEN ISO/TR 18486:2017

English Version

Plastics - Parameters comparing the spectral irradiance of a laboratory light source for weathering applications to a reference solar spectral irradiance (ISO/TR 18486:2018)

Plastiques - Paramètres de comparaison de la distribution spectrale d'une source de lumière de laboratoire pour les applications de vieillissement et d'une distribution spectrale solaire de référence (ISO/TR 18486:2018)

Kunststoffe - Berechnung der Qualitätsanpassung der spektralen Verteilung eines Sonnensimulators mit Bezug auf eine referenzspektrale Verteilung der Sonnenstrahlung (ISO/TR 18486:2018)

This Technical Report was approved by CEN on 3 December 2018. It has been drawn up by the Technical Committee CEN/TC 249.

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European foreword

This document (CEN ISO/TR 18486:2018) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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TECHNICAL
REPORT

ISO/TR
18486

Second edition
2018-12

**Plastics — Parameters comparing the
spectral irradiance of a laboratory
light source for weathering
applications to a reference solar
spectral irradiance**

*Plastiques — Paramètres de comparaison de la distribution spectrale
d'une source de lumière de laboratoire pour les applications de
vieillessement et d'une distribution spectrale solaire de référence*

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Foreword

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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).

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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*.

This second edition cancels and replaces the first edition (ISO/TR 18486:2016), which has been technically revised. The main changes compared to the previous edition are as follows:

- [Figures 1, 2](#) and [A.1](#): the keys and their key descriptions have been corrected;
- the document has been editorially revised.

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.

Introduction

Laboratory radiation sources generate radiation which is intended to simulate a defined “reference sun” as perfect as possible, where the fitting to the spectral irradiance in the materials sensitive range is most important. So far, the fitting is described verbally only (e.g. standards concerning artificial weathering) and the user decides for himself if the spectral irradiance $E(\lambda)$ indicated by the producer of the laboratory radiation source agrees suitable enough with the “reference sun” for his specific application or, occasionally, the classification describes the fitting to a wanted “reference sun” only insufficiently (e.g. for standard weathering tests).

This document deals with a procedure for the determination of objective factors characterizing the grade of fitting in quantity.

One procedure describes the grade of fitting of a laboratory radiation source to the defined reference sun for specific spectral ranges. A second procedure results in characterizing parameters for the respective wavelength ranges, incorporating known action spectra.

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