SLOVENSKI STANDARD
SIST EN ISO 10927:2018

01-december-2018

Nadomešča:
SIST EN ISO 10927:2011

Polimerni materiali - Ugotavljanje molekulske mase in porazdelitve molekulske mase polimerov z masno spektrometrijo po laserski desorpciji/ionizaciji v nosilcu (matriksu) (MALDI-TOF-MS) (ISO 10927:2018)

Plastics - Determination of the molecular mass and molecular mass distribution of polymer species by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF-MS) (ISO 10927:2018)

Kunststoffe - Bestimmung der Molmasse und Molmassenverteilung von polymeren Species durch matrixunterstütze Laser-Desorptions/Ionisations-Flugzeit-Massenspektrometrie (MALDI-TOF-MS) (ISO 10927:2018)

Plastiques - Détermination de la masse moléculaire et de la distribution des masses moléculaires des polymères par spectrométrie de masse, à temps de vol, après désorption/ionisation laser assistée par matrice (SM-MALDI-TOF) (ISO 10927:2018)

Ta slovenski standard je istoveten z: **EN ISO 10927:2018**

ICS:

71.040.50	Fizikalnokemijske analitske metode	Physicochemical methods of analysis
83.080.01	Polimerni materiali na splošno	Plastics in general

SIST EN ISO 10927:2018 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 10927

July 2018

ICS 83.080.01

Supersedes EN ISO 10927:2011

English Version

Plastics - Determination of the molecular mass and molecular mass distribution of polymer species by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF-MS) (ISO 10927:2018)

Plastiques - Détermination de la masse moléculaire et de la distribution des masses moléculaires des polymères par spectrométrie de masse, à temps de vol, après désorption/ionisation laser assistée par matrice (SM-MALDI-TOF) (ISO 10927:2018)

Kunststoffe - Bestimmung der Molmasse und Molmassenverteilung von polymeren Species durch matrixunterstütze Laser-Desorptions/Ionisations-Flugzeit-Massenspektrometrie (MALDI-TOF-MS) (ISO 10927:2018)

This European Standard was approved by CEN on 28 June 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 10927:2018) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 139 “Paints and varnishes” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.

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

This document supersedes EN ISO 10927:2011.

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Endorsement notice

The text of ISO 10927:2018 has been approved by CEN as EN ISO 10927:2018 without any modification.

INTERNATIONAL STANDARD

ISO 10927

Second edition
2018-06

Plastics — Determination of the molecular mass and molecular mass distribution of polymer species by matrix-assisted laser desorption/ ionization time-of-flight mass spectrometry (MALDI-TOF-MS)

Plastiques — Détermination de la masse moléculaire et de la distribution des masses moléculaires des polymères par spectrométrie de masse, à temps de vol, après désorption/ionisation laser assistée par matrice (SM-MALDI-TOF)

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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 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 5, *Physical-chemical properties.*

This second edition cancels and replaces the first edition (ISO 10927:2011), which has been technically revised to update Figure 1 and 6.7 on data handling.

Introduction

The molecular mass and molecular mass distribution of a synthetic polymer are fundamental characteristics that result from the polymerization process. They may be used for a wide variety of correlations for fundamental studies and for processing and product applications. Determination of the molecular mass and molecular mass distribution is used for quality control of polymers and for specification purposes in the commerce of polymers. The comparability of MALDI-TOF-MS results obtained in different laboratories can be ensured by using standardized conditions of measurement, identical samples and identical matrix preparation methods. The classification of MALDI-TOF-MS as an equitable (standardized) method compared with other established methods of polymer characterization could result in a significant increase in the use of MALDI-TOF-MS.