ICS 87.060.20 SLOVENSKÁ TECHNICKÁ NORMA December 2021

STN	**Gélová permeačná chromatografia (GPC) Časť 1: Tetrahydrofurán (THF) ako eluent (ISO 13885-1: 2020)**	**STN EN ISO 13885-1** 67 3058

Gel permeation chromatography (GPC) - Part 1: Tetrahydrofuran (THF) as eluent (ISO 13885-1:2020)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/21

Obsahuje: EN ISO 13885-1:2021, ISO 13885-1:2020

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 13885-1

September 2021

ICS 87.060.20

English Version

Gel permeation chromatography (GPC) - Part 1: Tetrahydrofuran (THF) as eluent (ISO 13885-1:2020)

Chromatographie par perméation de gel (GPC) - Partie 1: Utilisation de tétrahydrofurane (THF) comme éluant (ISO 13885-1:2020)

Gelpermeationschromatographie (GPC) - Teil 1: Tetrahydrofuran (THF) als Elutionsmittel (ISO 13885-1:2020)

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Ref. No. EN ISO 13885-1:2021 E

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European foreword

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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of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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.

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INTERNATIONAL STANDARD

ISO 13885-1

Third edition
2020-07

Gel permeation chromatography (GPC) —

Part 1: Tetrahydrofuran (THF) as eluent

Chromatographie par perméation de gel (GPC) —

Partie 1: Utilisation de tétrahydrofurane (THF) comme éluant

Reference number
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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 35, *Paints and varnishes*.

This third edition cancels and replaces the second edition (ISO 13885-1:2008), which has been technically revised. The main changes compared to the previous edition are as follows:

— this document has been adapted to the actual state of the art, especially with regards to software engineering;

— the scope has been revised;

— the definition for gel-permeation chromatography has been revised;

— the text has been revised editorially.

A list of all parts in the ISO 13885 series can be found on the ISO website.

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INTERNATIONAL STANDARD **ISO 13885-1:2020(E)**

Gel permeation chromatography (GPC) —

Part 1:
Tetrahydrofuran (THF) as eluent

WARNING — This document can involve hazardous materials, operations or equipment. It does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This document specifies the determination of the molar-mass distribution and the average molar mass values M_n (number average) and M_w (weight average) of polymers that are soluble in tetrahydrofuran (THF) by gel permeation chromatography (GPC).

NOTE Also known as size exclusion chromatography (SEC).

Even though the chromatograms obtained show good repeatability, it is possible that this method cannot be used with certain polymer types because of specific interactions (e.g. adsorption) within the sample/eluent/column system.

The conditions specified in this document are not applicable to the GPC analysis of polymer samples with M_w values greater than 10^6 g/mol and/or of polymers with elution limits outside the calibration range (see 7.6 and Annex C).

This document includes no correction method (e.g. for the elimination of peak broadening. If absolute molar-mass values are required, an absolute method (e.g. membrane osmometry for M_n or light scattering for M_w) 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 1513, *Paints and varnishes — Examination and preparation of test samples*

ISO 4618, *Paints and varnishes — Terms and definitions*

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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