



SLOVENSKI STANDARD

oSIST prEN ISO 25652:2025

01-december-2025

Tla, usedline, blato in odpadki - Analiza perfluoroalkilnih in polifluoroalkilnih snovi (PFAS) s tekočinsko kromatografijo visoke ločljivosti (HPLC) in masno spektrometrijo (ISO/DIS 25652:2025)

Sediment, Soil, sludge and waste - Analysis of PFAS by HPLC and mass spectrometry (ISO/DIS 25652:2025)

Boden, Sediment, Schlamm und Abfall - Analyse von PFAS durch HPLC und Massenspektrometrie (ISO/DIS 25652:2025)

Sédiments, sol, boues et déchets - Analyse des PFAS par CLHP et spectrométrie de masse (ISO/DIS 25652:2025)

Ta slovenski standard je istoveten z: prEN ISO 25652

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ICS:

13.080.10	Kemijske značilnosti tal	Chemical characteristics of soils
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en,fr,de



DRAFT International Standard

ISO/DIS 25652

Sediment, Soil, sludge and waste — Analysis of PFAS by HPLC and mass spectrometry

*Les sédiments, le sol, les boues et les déchets — Analyse des PFAS
par HPLC et spectrométrie de masse*

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ISO/DIS 25652:2025(en)**Foreword**

This document (prISO 25652:2025) has been prepared by Technical Committee CEN/TC 444 “Environmental characterization”, in collaboration with Technical Committee ISO/TC 190, Soil quality, Subcommittee SC 3, Chemical and physical characterization. The secretariat of CEN/TC 444 is held by NEN.

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ISO/DIS 25652:2025(en)**Introduction**

PFAS is a large group of industrially produced fluorinated hydrocarbons (alkyl substances). PFAS stands for per- and polyfluoroalkyl substances and contain a fully (per-) or partially (poly-) fluorinated carbon chain. The length normally ranges from 2 to 18 carbon atoms. The best known PFAS are PFOS (perfluorooctane sulfonic acid) and PFOA (perfluorooctanoic acid)¹⁾.

Since 2018, explicit attention has been requested for PFAS in soil trading. Due to the potential risks of the substance group or the lack of information about it, the target values for soil trading in some countries are relatively low at the level of a few µg / kg. That is why in many cases the chemical analyses are decisive in decision-making for soil trading and determining the possibilities for use of soil and dredged material released in projects. Precisely because of the diffuse occurrence of PFAS and the relatively strict target values, there is a generic need for a validated analysis method with a substantiated reporting limit and uniformity in the analysis methods and the associated pre-treatment.

The need for validation and uniformity does not only affect chemical analysis. The sampling strategy and method of performing the fieldwork also determine the final result. To this end, various guidelines have been and will be provided in other contexts and assessment guidelines and protocols have been drawn up.

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1) Both substances, PFOS and PFOA, consist of eight and seven fully fluorinated carbon atoms, respectively, with PFOS additionally having a sulfonate as a "functional group" on the last carbon atom and PFOA a carboxyl group.