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I.S. EN 15527:2008

Characterization of waste - Determination of polycyclic aromatic hydrocarbons (PAH) in waste using gas chromatography mass spectrometry (GC/MS)

I.S. EN 15527:2008

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English Version

Characterization of waste - Determination of polycyclic aromatic hydrocarbons (PAH) in waste using gas chromatography mass spectrometry (GC/MS)

Caractérisation des déchets - Dosage des hydrocarbures aromatiques polycycliques (HAP) dans les déchets par chromatographie en phase gazeuse/spectrométrie de masse (CG/SM)

Charakterisierung von Abfällen - Bestimmung von polycyclischen aromatischen Kohlenwasserstoffen (PAK) in Abfall mittels Gaschromatographie-Massenspektrometrie (GC/MS)

This European Standard was approved by CEN on 29 May 2008.

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Foreword

This document (EN 15527:2008) has been prepared by Technical Committee CEN/TC 292 “Characterization of waste”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

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Introduction

Polynuclear aromatic hydrocarbons (PAH) are ubiquitous because of the fact that they are released in appreciable quantities every year into the environment through the combustion of organic materials such as coal, fuel oils, petrol, wood, refuse and plant materials. Since some of these PAH compounds are carcinogenic or mutagenic, their presence in the environment (air, water, soil, sediment and waste) are regularly monitored and controlled. At present, the determination of PAH is carried out in these matrices in most of the routine laboratories following the preceding steps for sampling, pre-treatment, extraction, clean-up by measurement of specific PAH by means of gas chromatography in combination with mass spectrometric detection (GC-MS) or by HPLC in combination with UV-DAD- or Fluorescence-detection (HPLC-UV-DAD/FLD). However, the different matrices covered in this standard may contain a lot of contaminants. For this reason, the GC-MS method seems to be most appropriate for waste analysis.

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