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S.R. CEN/TS 16384:2012

Synthetic sport systems - Leaching test

S.R. CEN/TS 16384:2012

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English Version

Synthetic sport systems - Leaching test

Systèmes sportifs synthétiques - Essai de lixiviation

Synthetische Sportsysteme - Auslaugungsprüfung

This Technical Specification (CEN/TS) was approved by CEN on 17 June 2012 for provisional application.

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Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Symbols and abbreviations	6
5 Principle.....	7
6 Apparatus and reagents.....	7
6.1 General.....	7
6.2 Tank.....	7
6.3 Watering system	7
6.4 Choice and quantity of tested materials	10
7 Procedure	10
7.1 Testing conditions	10
7.1.1 Frequency/duration of the spraying/non-spraying periods and the flow rate	10
7.1.2 Experiment duration.....	11
7.1.3 Kind of sprayed water as leachant.....	11
7.1.4 Taking and sampling of collected percolates.....	11
7.1.5 Temperature and humidity conditions and storage.....	11
7.2 Preliminary tests.....	11
8 Synthetic sport systems for outdoor with no permeability capabilities.....	11
9 Performance characteristics	12
10 Report	12
10.1 General.....	12
10.2 Sample preparation and testing facility	12
10.3 Production of leachate	12
10.4 Characterisation of leachates.....	12
10.5 Presentation of the test results	13
Annex A (normative) Test of component (e.g. granule) of a synthetic sport system for outdoor use	14
A.1 Introduction	14
A.2 Indirect methods with percolation and wet-dry sequences	14
A.3 Indirect methods with percolation and without wet-dry sequences (column test)	15
A.3.1 General.....	15
A.3.2 Principle.....	15
A.3.3 Apparatus and reagents.....	15
A.3.4 Procedure	16
A.3.5 Test report	20
A.4 Indirect methods without percolation and without wet-dry sequences (one stage batch test)	21
A.4.1 General.....	21
A.4.2 Procedure	21
Annex B (informative) Construction specification for the testing apparatus	22
B.1 General.....	22
B.2 Tank.....	22

B.3	Spaying feed	23
B.4	Watering system.....	24
B.5	Preparation of synthetic sport	25
B.6	Nozzle	27
	Bibliography.....	28

Foreword

This document (CEN/TS 16384:2012) has been prepared by Technical Committee CEN/TC 217 “Sport surfaces”, the secretariat of which is held by AFNOR.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

To respond to the needs of buyers, end users and installers of synthetic sport systems for outdoor as well as to respond to the needs of producers of granulate as system constituents, CEN/TC 217 Working Group "Environmental Aspects" (WG 10) has worked on the following principles:

Firstly, define a laboratory test designed to assess the release of substances in ground water from a complete **"synthetic sport system for outdoor"**. The method of this test is based on the principle of large-scale in-situ tests (lysimeters). This test uses a sample of a sport surface similar to the sample used for laboratory type tests and representative of the system that will be installed.

Secondly, make it possible for integrators to assess specific leaching characteristics of relevant components and anticipate the results of the above laboratory test, specifying testing standards for a relative leaching assessment of system's constituents of different origins or nature, for instance granules (see Annex A).

NOTE This Technical Specification is based on the available knowledge and expertise. It is expected that it will be used in a harmonised way by the European Laboratories during the first three-years period and that this will result in an extended experience. Based on such experience, it is expected that the Technical Specification could be improved and transformed into an EN standard.

This document includes one normative annex and one informative annex. Additional information will be found in a guidance document in preparation.

1 Scope

This Technical Specification specifies testing methods concerning the release from synthetic sport systems for outdoor of substances in ground water, surface water and drainage water by performing a dedicated leaching test on a sample of a **"synthetic sport" system for outdoor**.

In addition, this Technical Specification provides tools for a relative leaching assessment of system's components (e.g. granules) of different origin or nature.

This Technical Specification does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3696, *Water for analytical laboratory use – specification and test methods (ISO 3696)*

EN ISO 5667-3, *Water quality – Sampling – Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3)*

EN 12506, *Characterization of waste – Analysis of eluates – Determination of pH, As, Ba, Cd, Cl-, Co, Cr, Cr VI, Cu, Mo, Ni, NO₂-, Pb, total S, SO₄²⁻, V and Zn*

EN 13370, *Characterization of waste – Analysis of eluates – Determination of Ammonium, AOX, conductivity, Hg, phenol index, TOC, easily liberatable CN-, F-*

EN 14877, *Synthetic surfaces for outdoor sports areas – Specification*

EN 15330-1, *Surfaces for sports areas – Synthetic turf and needle-punched surfaces primarily designed for outdoor use – Part 1 : specification for synthetic turf*

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

3.1
synthetic sport system
system above groundwater level used as "synthetic sport" and incorporating all the components needed between the support layer and the atmosphere

4 Symbols and abbreviations

None

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