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English Version

**Road and airfield surface characteristics - Part 12: Procedure for determining the skid resistance of a pavement surface using a device with longitudinal controlled slip: the BV 11 and Saab friction tester (SFT)**

Caractéristiques de surface des revêtements de chaussée des routes et des aérodromes - Partie 12: Mode opératoire de détermination de l'adhérence de la surface d'un revêtement de chaussée à l'aide d'un dispositif à frottement longitudinal contrôlé, le BV 11 et le dispositif d'essai de frottement Saab (SFT)

Oberflächeneigenschaften von Straßen und Flugplätzen - Teil 12: Verfahren zur Bestimmung der Griffigkeit von Fahrbahndecken durch Verwendung eines Geräts mit geregeltem Schlupf in Längsrichtung: das BV-11-Gerät und das Saab-Reibungsmessgerät (Saab-Friction-Tester)

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## Foreword

This document (CEN/TS 15901-12:2011) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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.

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## 1 Scope

This Technical Specification describes a method for determining the skid resistance of a surface by measurement of the longitudinal friction coefficient LFCN.

The method provides a measure of the wet skid resistance properties of a bound surface by measurement of the longitudinal friction coefficient using a continuous reading braked wheel fixed-slip device.

The test tyre is dragged, parallel to the direction of motion and perpendicular to a pre-wetted pavement under controlled speed conditions.

This document covers the operation of the BV11 and SAAB Friction Tester (SFT) with a fixed slip ratio of 17 %.

Machines conforming to the general characteristics of the BV11 and SAAB Friction Tester and with the specific provisions of this document may also be used for the tests.

## 2 Recommended uses

The BV11 and SFT are used in the following fields of application:

- approval of new surfacing;
- measurements for project-level compliance;
- investigation of surface skid resistance;
- comparative measurements among different devices;
- research measurements;
- for airfield use other specifications for speed, water film and tyre type and pressure are used than on road pavements.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **friction**

resistance to relative motion between two bodies in contact

NOTE The frictional force is the force, acting tangentially in the contact area.

### 3.2

#### **braking force coefficient**

ratio between the longitudinal frictional force and the load on the test tyre, the test tyre mass and the rim mass

NOTE This coefficient is without dimension.

### 3.3

#### **wet pavement skid resistance**

property of a trafficked surface that limits relative movement between the surface and the part of a vehicle tyre in contact with the surface when lubricated with a film of water