



BSI Standards Publication

Winter maintenance equipment — De-icing agents

Part 3: Other solid and liquid de-icing
agents — Requirements and test methods

National foreword

This Published Document is the UK implementation of CEN/TS 16811-3:2015.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

**Winter maintenance equipment - De-icing agents - Part 3:
 Other solid and liquid de-icing agents - Requirements and
 test methods**

Équipements de viabilité hivernale - Agents de
 dégivrage - Partie 3: Autres agents de dégivrage solides
 et liquides - Exigences et méthodes d'essai

Winterdienstausrüstung - Enteisungsmittel - Teil 3:
 Andere feste und flüssige Enteisungsmittel -
 Anforderungen und Prüfmethode

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European foreword

This document (CEN/TS 16811-3:2015) has been prepared by Technical Committee CEN/TC 337 "Road operation equipment and products", the secretariat of which is held by AFNOR.

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Introduction

De-icing agents are important for the winter maintenance of roads and other traffic areas. They can prevent or eliminate slippery conditions. The Technical Specification describes the requirements for de-icing agents with different properties from de-icing agents according EN 16811-1 and EN 16811-2, and which are used for specific services on roads. The testing methods are included in the Technical Specification.

The multitude of products which can be used in winter maintenance - liquid or solid, natural or industrial produced substances - requires the defining of performance criteria with which the products have to comply.

These criteria are used to assess the usability of the de-icing products while taking into consideration all aspects of the safety of the road user, of the protection of the environment and of the road conditions.

1 Scope

This Technical Specification defines general specifications and performance criteria of other solid and liquid de-icing agents than chlorides of sodium, calcium and magnesium, hereinafter referred to products, which are used with their particular properties for specific uses in winter service on roads and other traffic areas, with the exception of runways and parking areas of aircrafts. It establishes the test methods to control them. The products include inorganic and organic de-icing agents, and mixtures of chlorides of sodium, calcium, magnesium and potassium with organic and inorganic components which are intended for special properties like inhibition of corrosion, enhanced melting capacity or improved spreading pattern.

NOTE This Technical Specification defines specifications and performance criteria and offers for each a variation in the form of classes of requirements. This does not mean that there are products likely to respond to all the classes and criteria of the standard. Therefore, when defining the demand the user needs to make sure prior the appropriateness of his choice and the availability of suitable products.

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 15144, *Winter maintenance equipment — Terminology — Terms for winter maintenance*

prEN 16811-1:2015, *Winter service equipment — De-icing agents — Part 1: Sodium chloride — Requirements and test methods*

prEN 16811-2:2015, *Winter maintenance equipment — De-icing agents — Part 2: Calcium chloride and Magnesium chloride — Requirements and test methods*

EN 573-1, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 1: Numerical designation system*

EN 573-2, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 2: Chemical symbol based designation system*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 573-5, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 5: Codification of standardized wrought products*

EN 932-1, *Tests for general properties of aggregates — Part 1: Methods for sampling*

EN 1236, *Fertilizers — Determination of bulk density (loose) (ISO 3944, modified)*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10025-5, *Hot rolled products of structural steels — Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 13036-1, *Road and airfield surface characteristics — Test methods — Part 1: Measurement of pavement surface macrotexture depth using a volumetric patch technique*