

<b>STN</b>	<b>Skúšky na stanovenie chemických vlastností kameniva Časť 4: Stanovenie citlivosti kamennej múčky pre bitúmenové zmesi na vodu</b>	<b>STN EN 1744-4</b>
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Tests for chemical properties of aggregates - Part 4: Determination of water susceptibility of fillers for bituminous mixtures

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

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**Tests for chemical properties of aggregates - Part 4:  
Determination of water susceptibility of fillers for  
bituminous mixtures**

Essais pour déterminer les caractéristiques chimiques  
des granulats - Partie 4 : Détermination de la  
sensibilité à l'eau des fillers pour mélanges bitumineux

Prüfverfahren für chemische Eigenschaften von  
Gesteinskörnungen - Teil 4: Bestimmung der  
Wasserempfindlichkeit von Füllern in bitumenhaltigen  
Mischungen

This European Standard was approved by CEN on 22 November 2021.

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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**EN 1744-4:2021 (E)****European foreword**

This document (EN 1744-4:2021) has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

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

This document supersedes EN 1744-4:2005.

This document forms part of a series of tests for chemical properties of aggregates. Test methods for other properties of aggregates are covered by Parts of the following European Standards:

- EN 932, Tests for general properties of aggregates
- EN 933, Tests for geometrical properties of aggregates
- EN 1097, Tests for mechanical and physical properties of aggregates
- EN 1367, Tests for thermal and weathering properties of aggregates
- EN 13179, Tests for filler aggregate used in bituminous mixtures

The other parts of EN 1744 are, or will be:

- *Part 1: Chemical analysis*
- *Part 2: Determination of resistance to alkali/aggregate reaction*
- *Part 3: Preparation of eluates by leaching of aggregates*
- *Part 5: Determination of acid soluble chloride salts*
- *Part 6: Determination of the influence of aggregate extract on the initial setting time of cement*
- *Part 7: Determination of loss on ignition of Municipal Incinerator Bottom Ash Aggregate (MIBA Aggregate)*
- *Part 8: Sorting test to determine metal content of Municipal Incinerator Bottom Ash (MIBA) Aggregates*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This document specifies the procedure for the determination of the water susceptibility of fillers for bituminous mixtures, by separation of filler from a bitumen filler mixture.

A method for the determination of water susceptibility by volume increase and loss of stability of a Marshall specimen is described in Annex A.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 932-2, *Tests for general properties of aggregates - Part 2: Methods for reducing laboratory samples*

EN 932-5, *Tests for general properties of aggregates - Part 5: Common equipment and calibration*

EN 933-1:2012, *Tests for geometrical properties of aggregates - Part 1: Determination of particle size distribution - Sieving method*

EN 933-2, *Tests for geometrical properties of aggregates - Part 2: Determination of particle size distribution - Test sieves, nominal size of apertures*

EN 933-3, *Tests for geometrical properties of aggregates - Part 3: Determination of particle shape - Flakiness index*

EN 933-4, *Tests for geometrical properties of aggregates - Part 4: Determination of particle shape - Shape index*

EN 12274-7:2005, *Slurry surfacing - Test Methods - Part 7: Shaking abrasion test*

EN 12591, *Bitumen and bituminous binders – Specifications for paving grade bitumen*

EN 12697-6:2020, *Bituminous mixtures - Test methods - Part 6: Determination of bulk density of bituminous specimens*

EN 12697-12:2018, *Bituminous mixtures - Test methods - Part 12: Determination of the water sensitivity of bituminous specimens*

EN 12697-30, *Bituminous mixtures - Test methods - Part 30: Specimen preparation by impact compactor*

EN 12697-34, *Bituminous mixtures - Test methods - Part 34: Marshall test*

EN 12697-35, *Bituminous mixtures - Test methods - Part 35: Laboratory mixing*

EN 12846-2, *Bitumen and bituminous binders - Determination of efflux time by the efflux viscometer - Part 2: Cut-back and fluxed bituminous binders*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth (ISO 3310-1)*