

# Bitumen and bituminous binders — Determination of breaking behaviour

## Part 1: Determination of breaking value of cationic bituminous emulsions, mineral filler method

ICS 75.140; 91.100.50

# National foreword

This British Standard is the UK implementation of EN 13075-1:2009. It supersedes BS EN 13075-1:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PTI/13, Petroleum testing and terminology.

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

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## Amendments/corrigenda issued since publication

| Date           | Comments                                        |
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| 31 August 2009 | Incorporating CEN correction notice 06 May 2009 |
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English Version

**Bitumen and bituminous binders - Determination of breaking  
behaviour - Part 1: Determination of breaking value of cationic  
bituminous emulsions, mineral filler method**

Bitumes et liants bitumineux - Détermination du  
comportement à la rupture - Partie 1 : Détermination de  
l'indice de rupture des émulsions cationiques de bitume,  
méthode des fines minérales

Bitumen und bitumenhaltige Bindemittel - Bestimmung des  
Brechverhaltens - Teil 1: Bestimmung des Brechwertes  
kationischer Bitumenemulsionen, Verfahren mit  
Feinmineralstoff

This European Standard was approved by CEN on 10 February 2009.

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## Contents

Page

|                                                                  |    |
|------------------------------------------------------------------|----|
| Foreword.....                                                    | 3  |
| 1 Scope .....                                                    | 4  |
| 2 Normative references .....                                     | 4  |
| 3 Terms and definitions .....                                    | 4  |
| 4 Principle.....                                                 | 4  |
| 5 Reagents and materials .....                                   | 4  |
| 6 Apparatus .....                                                | 5  |
| 7 Sampling.....                                                  | 6  |
| 8 Procedure .....                                                | 6  |
| 9 Calculation.....                                               | 7  |
| 10 Expression of results .....                                   | 7  |
| 11 Precision.....                                                | 7  |
| 12 Test report .....                                             | 8  |
| Annex A (normative) Characteristics of the Sikaisol filler ..... | 13 |
| Bibliography .....                                               | 14 |

## Foreword

This document (EN 13075-1:2009) has been prepared by Technical Committee CEN/TC 336 "Bituminous binders", the secretariat of which is held by AFNOR.

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 September 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

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.

This document supersedes EN 13075-1:2002.

This European Standard, EN 13075, consists of the following parts under the general title *Bitumen and bituminous binders – Determination of breaking behaviour*:

*Part 1 – Determination of breaking value of cationic bituminous emulsions, mineral filler method;*

*Part 2 – Determination of fines mixing time of cationic bituminous emulsions.*

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

The CEN correction notice 06 May 2009 provided a revised English language text incorporating the following editorial corrections.

In Annex A the company name now reads SIBELCO and their email address now reads commercial.hostun@sibelco.fr

## 1 Scope

This European Standard specifies a method for the determination of the breaking value of cationic bituminous emulsions.

**WARNING — The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems 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 referenced documents are indispensable for the application 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 58, *Bitumen and bituminous binders – Sampling bituminous binders*

EN 12594, *Bitumen and bituminous binders – Preparation of test samples*

## 3 Terms and definitions

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

**3.1**  
**breaking value**  
dimensionless number corresponding to the amount of reference filler, in grams, needed to coagulate 100 g of bitumen emulsion

## 4 Principle

A reference filler is added at a uniform rate to a specified quantity of stirred cationic bitumen emulsion. When the emulsion has broken completely, the amount of added filler is determined by weighing. The mass of filler (in grams) multiplied by 100 and divided by the amount of emulsion (in grams) is the breaking value.

NOTE The cationic or anionic nature of an emulsion can be determined with EN 1430 [1].

## 5 Reagents and materials

### 5.1 Reference filler

The Sikaisol filler<sup>1</sup> (characteristics are given in Annex A) shall be used as the reference filler.

Other filler such as the Forshammer filler may be used as an alternative to the Sikaisol filler. In the event of dispute, the Sikaisol filler shall be used.

### 5.2 Cleaning agents, as used conventionally in laboratories.

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<sup>1</sup> This information is given for the convenience of users of this European Standard and does not constitute an endorsement by CEN of the product name. Equivalent products may be used if they can be shown to lead to the same results, or if a correlation between the products has been established.