

ILNAS

Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 14188-1:2004

Joint fillers and sealants - Part 1: Specifications for hot applied sealants

Produits de scellement de joints - Partie
1 : Spécification pour produits de
scellement appliqués à chaud

Fugeneinlagen und Fugenmassen - Teil 1:
Anforderungen an heißverarbeitbare
Fugenmassen

09/2004



National Foreword

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Fugeneinlagen und Fugenmassen - Teil 1: Anforderungen an heißverarbeitbare Fugenmassen

This European Standard was approved by CEN on 9 July 2004.

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Contents		Page
Foreword.....		3
1 Scope		4
2 Normative references		4
3 Terms and definitions		5
4 Classification and specification		5
4.1 Joint sealant.....		5
4.2 Primer.....		6
5 Requirements		6
5.1 Shelf life		6
5.2 Compliance to requirements after safe heating temperature		6
5.3 Softening point.....		6
5.4 Density		6
5.5 Cone penetration		6
5.6 Penetration and recovery at +25 °C (resilience)		6
5.7 Heat stability.....		7
5.8 Flow resistance		7
5.9 Resistance to fuel immersion (solubility)		7
5.10 Compatibility with asphalt pavements		7
5.11 Bonding strength		7
5.12 Cohesion.....		7
5.13 Dangerous substances.		7
6 Evaluation of conformity.....		10
6.1 General.....		10
6.2 Type Testing.....		10
6.2.1 Initial Type Testing (ITT)		10
6.2.2 Further Type Testing		10
6.3 Factory Production Control (FPC)		10
6.3.1 General.....		10
6.3.2 Frequency of testing		10
6.3.3 Equipment		11
6.3.4 Raw materials and components.....		11
6.3.5 Design process		11
6.3.6 Non-conforming products		11
7 Marking, labelling and packaging		11
7.1 General.....		11
7.2 Hot applied joint sealant		12
7.3 Primer.....		12
7.4 Containers		12
Annex A (normative) Initial Type Testing and frequencies of testing for Factory Production Control		13
Annex B (informative) Example of a product data sheet.....		14
B.1 General information.....		14
Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives		16
ZA.1 Scope and relevant characteristics		16
ZA.2 Procedure(s) for attestation of conformity		17
ZA.2.1 Systems of attestation of conformity		17
ZA.2.2 EC Certificate and declaration of conformity		18
ZA.3 CE marking and labelling.....		18
Bibliography		20

Foreword

This document (EN 14188-1:2004) has been prepared by Technical Committee CEN/TC 227 "Road materials", the secretariat of which is held by DIN.

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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

This document is one of a series of standards as listed below:

EN 14188-1, Joint fillers and sealants — Part 1: Specifications for hot applied sealants.

prEN 14188-2, Joint fillers and sealants - Part 2: Specifications for cold applied sealants

prEN 14188-3, Joint fillers and sealants - Part 3: Specification for preformed joint seals

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

1 Scope

This document specifies requirements for hot-applied normal and fuel resistant joint sealants to be used in roads, airfields and other trafficked areas. The specification also applies to hot-applied normal joint sealants in bituminous surfacing and between bituminous surfacing and concrete pavements.

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 1427, *Bitumen and bituminous binders — Determination of softening point — Ring and Ball method.*

EN 13880-1, *Hot applied joint sealants — Part 1: Test methods for the determination of density at 25 °C.*

EN 13880-2, *Hot applied joint sealants — Part 2: Test methods for the determination of cone penetration at 25 °C.*

EN 13880-3, *Hot applied joint sealants — Part 3: Test methods for the determination of penetration and recovery (resilience).*

EN 13880-4, *Hot applied joint sealants — Part 4: Test method for the determination of heat resistance - Change in penetration value*

EN 13880-5, *Hot applied joint sealants — Part 5: Test methods for the determination of flow resistance.*

EN 13880-6, *Hot applied joint sealants — Part 6: Test methods for the preparation of samples for testing.*

EN 13880-7, *Hot applied joint sealants — Part 7: Function testing of joint sealants.*

EN 13880-8, *Hot applied joint sealants — Part 8: Test method for the determination of the change in weight of fuel resistant joint sealants after fuel immersion.*

EN 13880-9, *Hot applied joint sealants — Part 9: Test method for the determination of compatibility with asphalt pavements.*

EN 13880-10, *Hot applied joint sealants — Part 10: Test method for the determination of adhesion and cohesion following continuous extension and compression.*

EN 13880-13, *Hot applied joint sealants — Part 13: Test method for the determination of the discontinuous extension (adherence test).*

3 Terms and definitions

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

3.1

joint

vertical discontinuity between the adjacent faces of slabs in the concrete layer of a pavement or between an adjacent bituminous layer and a pavement, formed for the purpose of providing some movement capability

3.2

joint filler

strip of compressible heat-resistant material used to fill a joint space

3.3

joint sealant

material that, when applied in a uniform state to a joint, seals it by adhering to appropriate surfaces within the joint to prevent the ingress of water and deleterious substances

3.4

primer

surface coating applied to the faces of the joint before placing the sealant in order to ensure its adhesion

3.5

hot applied sealant

thermoplastic or thermosetting material which is heated up to the recommended pouring temperature prior to placement in the joint slot

3.6

pouring temperature

temperature to which the sealant is heated for the stated length of time as recommended by the manufacturer

3.7

safe heating temperature

maximum temperature as recommended by the manufacturer to which the sealant can be heated for a period of 6 h

3.8

manufacturer's limiting value (MLV)

manufacturer's stated minimum or maximum value to be met during testing according to the requirements of this European Standard

3.9

manufacturer's declared value (MDV)

value declared by the manufacturer accompanied by a declared tolerance

3.10

cold climate area

areas in which the temperature can go below $-25\text{ }^{\circ}\text{C}$ and the opening of the joint can exceed 35 %

4 Classification and specification

4.1 Joint sealant

Hot applied joint sealants shall be one of the types given in Table 1.