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 °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.

Table 1 — Types of hot applied joint sealants

Material	Type
Elastic – high extension	N1
Normal – low extension	N2
High extension fuel-resistant	F1
Low extension fuel-resistant	F2

4.2 Primer

Where a primer is recommended by the manufacturer of the joint sealant, the manufacturer's directions for its use shall be followed. Where a primer is part of the system recommended by the manufacturer, then specimens prepared for the appropriate performance tests shall include a primer.

The manufacturer shall always specify whether a primer is required or not.

5 Requirements

5.1 Shelf life

When stored in the original unopened containers and within the temperature range and expiry date recommended by the manufacturer, the sealant and primer (if required) shall be capable of being heated and applied to the joint and shall conform to this standard.

5.2 Compliance to requirements after safe heating temperature

When heated to the safe heating temperature for a period of 6 h $\pm$ 15 min, the sealant shall conform to all requirements of this standard.

5.3 Softening point

The softening point shall be determined in accordance with EN 1427 and the result shall conform to the relevant value given in Table 2, line 2.

5.4 Density

The density shall be determined in accordance with EN 13880-1 and the result shall conform to the manufacturer's declared values as defined in Table 2, line 3.

5.5 Cone penetration

The cone penetration shall be determined in accordance with EN 13880-2 and the result shall conform to the values given in Table 2, line 4.

5.6 Penetration and recovery at +25 °C (resilience)

The penetration and recovery shall be determined in accordance with EN 13880-3 and the results shall conform to the values given in Table 2, line 5.

5.7 Heat stability

The heat stability shall be determined in accordance with EN 13880-4 and the results shall conform to the values in Table 2, line 6.

5.8 Flow resistance

The flow resistance shall be determined in accordance with EN 13880-5 and the results shall conform to the values given in Table 2, line 7.

5.9 Resistance to fuel immersion (solubility)

The resistance to fuel immersion shall be determined in accordance with EN 13880-8 and the result shall conform to the relevant values in Table 2, line 8.

5.10 Compatibility with asphalt pavements

The compatibility of hot applied sealants type N1 and type N2 with asphalt pavements shall be determined in accordance with EN 13880-9 and the result shall conform to the requirements in Table 2, line 9.

5.11 Bonding strength

The bonding strength shall be determined in accordance with EN 13880-13 and the results shall conform to the relevant values in Table 2, line 10.

5.12 Cohesion

The cohesion shall be determined in accordance with EN 13880-10 and the results shall conform to the relevant values in Table 2, line 11.1.

For cold climate areas: The cohesion shall be determined in accordance with EN 13880-7 and the results shall conform to the relevant values in Table 2, line 11.2.

5.13 Dangerous substances.

The manufacturer shall ensure that there are no emissions of any substances hazardous to health or the environment in excess of the legally permitted level in the member state of destination.

Table 2 — Requirements and test methods for hot applied sealants

Column	1	2	3	4	5	6
Line	**Material properties**	**Type of hot applied sealant**				**Test method**
		not fuel resistant		**fuel resistant**		
		N1	**N2**	**F1**	**F2**	
1	Preparation of samples for testing and perceptible properties	Homogenous in accordance with manufacturer's declaration				EN 13880-6
2	Softening point, ring and ball, in °C	≥85	≥85	≥85	≥75	EN 1427
3	Density at +25 °C, in Mg/m^3	In accordance with manufacturer's declaration				EN 13880-1
4	Cone penetration at +25 °C, 5 s, 150 g, in 0,1 mm	40 to 130	40 to 100	40 to 130	40 to 100	EN 13880-2
5	Penetration and recovery (resilience) at +25 °C, 75 g ball, 5 s, in %	≥60	≤60	≥60	≤60	EN 13880-3
6	Heat stability/ change in penetration value at +70 °C/168 h					EN 13880-4
6.1	cone penetration, in 0,1 mm	40 to 130	40 to 100	40 to 130	40 to 100	
6.2	penetration and recovery (resilience), in %	≥60	≤60	≥60	≤60	
7	Flow resistance, initial and heat degradation at +60 °C, 5 h, 75° angle, in mm	≤2	≤3	≤5	≤10	EN 13880-5
8	Resistance to fuel immersion (solubility)					EN 13880-8
8.1	+35 °C, 24 h/change in mass, %	–	–	–	≤2	
8.2	+50 °C, 24 h/change in mass, %	–	–	≤2	–	
9	Compatibility with asphalt pavements at +60 °C, 72 h	No failures in adhesion and no formation of any oily exudate		–	–	EN 13880-9
10	Bonding strength					EN 13880-13
10.1	Total extension within 5 h, in mm	≥5	≥5	≥5	≥5	
10.2	Test temperature, in °C	–25	–20	–20	–10	
10.3	Immersions – water immersion, 14 days, room temperature – fuel immersion (see line 8.2)	 x	 x	 x	 x	
10.4	Tensions – maximum tension, in N/mm^2 – final tension, in N/mm^2	 1,00 ≤0,15	 0,75 –	 – –	 – –	
10.5	Adhesion failure – totally separated block faces, in mm^2 – depth of separation, in mm	 none none	 none none	 <50 <3	 <50 <3	
10.6	Cohesion failure – totally superficial area of cracks, in mm^2 – depth of cracks, in mm	 none none	 none none	 <20 <3	 <20 <3	

Table 2 *(concluded)*

Column	1	2	3	4	5	6
Line	**Material properties**	**Type of hot applied sealant**				**Test method**
		not fuel resistant		**fuel resistant**		
		N1	**N2**	**F1**	**F2**	
11.1	Cohesion					EN 13880-10
11.1.1	Extension, in mm Extension, in %	18 75	18 75	12 50	12 50	
11.1.2	Number of cycles	3	3	3	3	
11.1.3	Test temperature, in °C	−20	0	−20	0	
11.1.4	Maximum tension, in N/mm^2	0,48 ±0,10	0,48 ±0,10	0,48 ±0,10	0,48 ±0,10	
11.1.5	Adhesion – totally separated block faces, in mm^2 – depth of separation, in mm	 <50 <3	 <50 <3	 <50 <3	 <50 <3	
11.1.6	Cohesion – totally superficial area of cracks, in mm^2 – depth of cracks, in mm	 <20 <3	 <20 <3	 <20 <3	 <20 <3	
11.2	Cohesion (for cold climate areas)					EN 13880-7
11.2.1	Temperature cycling range, in °C	+25/–30	+25/–20	+25/–30	+25/–20	
11.2.2	Rate of deformation, in mm/h	0,6	0,6	0,6	0,6	
11.2.3	Extension – compression, in % – extension, in %	 20 60	 5 15	 20 60	 5 15	
11.2.4	Number of cycles	3	3	3	3	
11.2.5	Rain, total time +5 °C/+20 °C, in %	20	20	20	20	
11.2.6	Inspections after extension to 60 % at room temperature					
	– adhesive failures – cohesive failures	none none	none none	none none	none none	
11.2.7	Inspection after compression and re-elongation to 60 % with 2-mm-notch in 1 corner					
	– adhesive failure – cohesive failure	none none	none none	none none	none none	
11.2.8	Maximum tension at lower temperature – Asphalt, in N/mm^2 – Concrete, in N/mm^2	 0,3 1,0	 0,3 1,0	 0,3 1,0	 0,3 1,0	

6 Evaluation of conformity

6.1 General

The compliance of the product with the requirements of this document shall be demonstrated by:

— Initial Type Testing;

— Factory Production Control by the manufacturer, including product assessment.

The characteristics indicated in clause 5 shall be determined within 3 months of the date of delivery from the manufacturer.

For the purposes of testing, the product may be grouped into families, where it is considered that the selected property is common to all products within that family.

6.2 Type Testing

6.2.1 Initial Type Testing (ITT)

Initial Type Testing shall be performed to show conformity with this document. Tests previously performed in accordance with the provisions of this document (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account. In addition, initial type testing shall be performed at the beginning of the production of a new product type (unless a member of the same family) or at the beginning of a new method of production (where this may affect the stated properties).

All characteristics in clause 5 shall be subject to Initial Type Testing.

6.2.2 Further Type Testing

Whenever a change occurs in the product design, the raw material or supplier of the components, or the production process (subject to the definition of a family), which would change significantly one or more of the characteristics, the Type Tests shall be repeated for the appropriate characteristic(s).

6.3 Factory Production Control (FPC)

6.3.1 General

The manufacturer shall establish, document and maintain a FPC system to ensure that the products placed on the market conform with the stated performance characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

A FPC system conforming with the requirements of EN ISO 9001, and made specific to the requirements of this document, is considered to satisfy the above requirements.

The results of inspections, tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded and retained for the period specified in the manufacturer's FPC procedures.

6.3.2 Frequency of testing

Minimum frequencies of testing for Factory Production Control shall be as shown in Table A.1.

6.3.3 Equipment

6.3.3.1 Testing

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to the documented procedure, frequencies and criteria.

6.3.3.2 Manufacturing

All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the manufacturer's written procedures and the records retained for the period defined in the manufacturer's FPC procedures.

6.3.4 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

6.3.5 Design process

The Factory Production Control system shall document the various stages in the design of products, identify the checking procedure and those individuals responsible for all stages of design.

During the design process itself, a record shall be kept of all checks, their results, and any corrective actions taken. This record shall be sufficiently detailed and accurate to demonstrate that all stages of the design phase, and all checks, have been carried out satisfactorily.

6.3.6 Non-conforming products

The manufacturer shall have written procedures which specify how non-conforming products shall be dealt with. Any such events shall be recorded as they occur and these records shall be kept for the period defined in the manufacturer's written procedures.

7 Marking, labelling and packaging

7.1 General

Each container of the hot applied joint sealant or primer shall be clearly and indelibly marked, giving as a minimum requirement the following information:

7.2 Hot applied joint sealant

a) manufacturer's name and address;

b) type, grade and batch number of the compound;

c) expiry date or the date of manufacture;

d) safe heating temperature;

e) type of primer to be used, if any;

f) the number and date of this document;

g) directions for storage and disposal.

h) labelling according to national regulations related to dangerous substances and/or health and safety.

Where clause ZA.3 covers the same information as required by this clause, the requirements of this clause are met.

7.3 Primer

a) manufacturer's name and address;

b) designation and batch number and date of manufacture;

c) expiry date;

d) type of sealant with which it is to be used;

e) directions for use;

f) directions for storage and disposal.

g) labelling according to national regulations related to dangerous substances and/or health and safety.

Where clause ZA.3 covers the same information as required by this clause, the requirements of this clause are met. The location of marking in accordance with this clause shall not lead to confusion with the regulatory marking.

7.4 Containers

Hot applied joint sealants and primers shall be supplied in sealed packages which allow the sealant to be stored without detriment for the full shelf life under the manufacturer's recommended conditions.

Annex A
(normative)

Initial Type Testing and frequencies of testing for Factory Production Control

The minimum frequencies of testing for Factory Production Control are given in Table A.1.

Table A.1 — Initial Type Testing and frequencies of Factory Production Control

Column	1	2	3	4	5	6	7
Line	**Product characteristic**	**Clause**	**Initial Type Testing**	**Factory Production Control: Minimum frequencies of testing per**			
				batch	**week**	**month**	**year**
1	Softening point	5.3	X	1			
2	Density at +25 °C	5.4	X	1			
3	Cone penetration at +25 °C	5.5	X	1			
4	Cone penetration and recovery (resilience)	5.6	X	1			
5	Heat stability	5.7	X				1
6	Flow resistance	5.8	X	1			
7	Resistance to fuel immersion	5.9	X				
8	Compatibility with asphalt pavements	5.10	X				
9	Bonding strength	5.11	X				1
10	Cohesion	5.12	X				1

Annex B
(informative)

Example of a product data sheet

B.1 General information

The product data sheet may contain:

— date and reference of this technical data sheet;

— product trade name;

— manufacturer / supplier;

— origin / source of manufacturing;

— description of the product;

— primer and amount for the application;

— intended use and method of application;

— product performance[1)] (see Table B.1);

— certification mark where relevant;

— consumer information[2)].

Table B.1 — Information from testing

Column	1	2	3	4	5
Line	**Characteristic**	**Test method**	**Unit**	**Expression of result[a]**	**Value or statement[b]**
1	Softening point	EN 1427	°C	MDV	
2	Density at 25 °C	EN 13880-1	Mg/m^3	MDV	
3	Cone penetration at 25 °C	EN 13880-2	0,1 mm	MDV	
4	Penetration and recovery	EN 13880-3	%	MDV	
5	Heat stability, cone penetration	EN 13880-4	0,1 mm	MLV	
6	Heat stability, recovery	EN 13880-4	%	MLV	
7	Flow resistance, initial	EN 13880-5	mm	MLV	
8	Flow resistance, after heat degradation	EN 13880-5	mm	MLV	

1) See ZA.3 which limits the information to be given in association with CE marking.

2) e.g. restrictions concerning use and storage and safety precaution during installation and disposal.

Table B.1 *(concluded)*

Column	1	2	3	4	5
Line	**Characteristic**	**Test method**	**Unit**	**Expression of result**[a]	**Value or statement**[b]
9	Resistance to fuel immersion, change in mass	EN 13880-8	%	MLV	
10	Compatibility with asphalt pavements	EN 13880-9	–	Pass	
11	Bonding strength	EN 13880-13	–		
11.1	– Tensions			MLV	
11.2	– Adhesion/Cohesion			Pass	
12	Cohesion	EN 13880-10	–		
12.1	– Tensions			MLV	
12.2	– Adhesion/Cohesion			Pass	
13	Cohesion	EN 13880-7	–		
13.1	– Tensions			MLV	
13.2	– Adhesion/Cohesion			Pass	

[a] MLV: manufacturer's limiting value according to 3.8; MDV: manufacturer's declared value according to 3.9.

[b] To be completed by the manufacturer; – not relevant.

Annex ZA
(informative)

Clauses of this European Standard addressing essential requirements or other provisions of EU Directives

ZA.1 Scope and relevant characteristics

This European Standard has been prepared under mandate M/124 Road construction products (as amended) given to CEN by the European Commission and the European Free Trade Association.

The clauses of this European Standard shown in this annex meet the requirements of the mandate given under the EU Construction Products Directive (89/106/EEC).

Compliance with these clauses confers a presumption of fitness of the hot applied joint sealants covered by this annex for the intended uses indicated herein; reference shall be made to the information accompanying the CE marking.

WARNING — Other requirements and other EU Directives, not affecting the fitness for intended uses, can be applicable to the joint sealant falling within the scope of this European Standard.

NOTE 1 In addition to any specific clauses relating to dangerous substances contained in this Standard, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the EU Construction Products Directive, these requirements need also to be complied with, when and where they apply.

NOTE 2 An informative database of European and national provisions on dangerous substances is available at the Construction web site on EUROPA (CREATE, accessed through http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm).

— This annex has the same scope as Clause 1 of this standard with regard to the product covered. It establishes the conditions for the CE marking of hot applied joint sealants intended for the use indicated below and shows the relevant clauses applicable (see Table ZA.1).

Construction Product: Hot applied joint sealants.

Intended uses: Roads, airfields and other concrete pavements and also hot applied normal joint sealants in bituminous surfacing and between bituminous surfacing and concrete pavements.

Table ZA.1 — Characteristics meeting Mandate M 124 given under CPD

Essential characteristics	Requirement clauses in this (or another) EN	Levels and/or classes	NOTES
Bonding strength	5.11	–	threshold value
Cohesion	5.12	–	threshold value
Watertightness	5.11	–	threshold value
	5.12	–	threshold value
Resistance to deformation	5.6	–	threshold value
	5.5	–	threshold value
	5.7	–	threshold value
	5.8	–	threshold value
Durability of cohesion against liquid chemicals	5.9	–	threshold value
Durability of bonding strength and watertightness in the contact with asphalt pavements	5.10	–	threshold value
– means that no classes or levels are given by the mandate			

ZA.2 Procedure(s) for attestation of conformity

ZA.2.1 Systems of attestation of conformity

The systems of attestation of conformity of joint sealants indicated in Table ZA.1, in accordance with the Decision of the Commission 98/601/EC dated 1998-10-24, as given in annex III of the mandate M/124 and shown in Table ZA.2 for the indicated intended use and relevant classes.

Table ZA.2 — Systems of attestation of conformity

Product	Intended use	Level(s) or class(es)	Attestation of conformity systems
Hot applied joint sealant	joints in roads, airfields, bridge decks, parking decks etc.	None	4
System 4: See Directive 89/106/EEC (CPD) annex III.2.(ii), Third possibility			

Table ZA.3 — Assignment of evaluation of conformity tasks for hot applied joint sealants under system 4

Tasks		Content of the task	Evaluation of conformity clauses to apply
Tasks for the manufacturer	Factory production control (F.P.C)	Parameters related to all relevant characteristics of Table ZA.1	6.3
	Initial type testing	All relevant characteristics of Table ZA.1	6.2

ZA.2.2 EC Certificate and declaration of conformity

This clause applies to the case of products under systems 4.

When compliance with the conditions of this annex is achieved, the manufacturer or his agent established in the EEA shall prepare and retain a declaration of conformity (EC Declaration of conformity), which entitles the manufacturer to affix the CE marking. This declaration shall include:

— name and address of the manufacturer, or his authorised representative established in the EEA, and the place of production;

— description of the product (type, identification, use), and a copy of the information accompanying the CE marking;

— provisions to which the product conforms (e.g. annex ZA of this European Standard);

— particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions, etc);

— name of, and position held by, the person empowered to sign the declaration on behalf of the manufacturer or his authorised representative.

The above mentioned declaration and certificate shall be presented in the official language or languages of the Member State in which the product is to be used.

ZA.3 CE marking and labelling

The manufacturer or his authorised representative established within the EEA is responsible for the affixing of the CE marking. The CE marking symbol to affix shall be in accordance with Directive 93/68/EC. The CE marking symbol and the information required by clause 7 shall be shown on a label attached to the product.

The CE marking symbol shall also appear on the accompanying technical documentation, together with the following:

— name or identifying mark and registered address of the producer:

— last two digits of the year in which the marking is affixed;

— reference to this European Standard EN 14188-1

— a description of the product: Hot applied joint sealant Type XX. Primer used in tests: XX

— information on the relevant characteristic values in Table ZA.1.

The NPD option shall not be used where the characteristic is subject to a threshold level. Otherwise, the NPD option may be used when and where the characteristic, for a given intended use, is not subject to regulatory requirements.

Figure ZA.1 gives an example of the information to be given on the commercial documents.

CE	CE conformity marking, consisting of the "CE"-symbol given in Directive 93/68/EEC.
AnyCo Ltd, PO Box 21, B-1050 **01**	Name or identifying mark and registered address of the producer Last two digits of the year in which the marking was affixed
EN 14188-1 Hot applied joint sealant Type XX. Primer used in tests: XX	No. of European Standard Description of product and information on regulated characteristics
Bonding strength - maximum tension [N/mm^2]: ≤0,68 - final tension [N/mm^2]: ≤0,12 - adhesion failure [%]: 0 - cohesion failure [%]: 0	
Cohesion: - maximum tension [N/mm^2]: 0,48 - adhesion failure [mm^2]: ≤50 - cohesion failure [mm^2]: ≤20	
Cohesion for cold climate areas (Note: alternative or additional) - maximum tension to asphalt [N/mm^2]: 0,18 - maximum tension to concrete [N/mm^2]: 0,66 - adhesion failure [-]: none - cohesion failure [-]: none	
Resistance to deformation Resilience [%] 65 Cone penetration [0,1 mm] 78	
Heat stability - Cone penetration [0,1 mm] ≤90 - Resilience [%] ≥65	
Flow resistance [mm] ≤1	
Durability Compatibility with asphalt pavement [-] passed	
Dangerous substances X : less than 0,2 ppm	

Figure ZA.1 — Example CE marking information to be given on the accompanying commercial (technical) documentation for a product

In addition to any specific information relating to dangerous substances shown above, the product should also be accompanied, when and where required and in the appropriate form, by documentation listing any other legislation on dangerous substances for which compliance is claimed, together with any information required by that legislation. *Note: European legislation without national derogations need not be mentioned.*

Bibliography

[1] Guidance paper F "Durability and the Construction Products Directive".

[2] Guidance paper D "CE marking under the Construction Products Directive".

[3] Guidance paper H "A harmonized approach to dangerous substances under the Construction products directive".

[4] Essential Requirements (ER) n° 3 "Hygiene, health and environmental protection" of the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to constructions products (89/106/EEC).

[5] web site EUROPA (CREATE, accessed through http://europa.eu.int)

[6] EN ISO 9001:2000, *Quality management systems — Requirements (ISO 9001:2000).*

[7] EN 13880-11, *Hot applied joint sealants — Part 11: Test method for the preparation of asphalt test blocks used in the function test and for the determination of compatibility with asphalt pavements*.