

Test report no.: 205279/19-III

Customer: Sika Services AG
Stuttgarter Straße 117
72574 Bad Urach
DEUTSCHLAND

Order: Assessment of the staining of substrates by
Joint sealants according to ISO 16938-1

E-mail of: 2019-11-07 **Ref:** Mr Ralf Heinzmann

Sample receipt: 2020-01-21

Test period: 2020-02-05 to 2020-05-20

The test report comprises 4 pages.

Würzburg, 26 May 2020
Lg/km

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Die auszugsweise Wiedergabe, Vervielfältigung und Übersetzung dieses Berichtes bedarf der schriftlichen Genehmigung der SKZ - Testing GmbH. Die Ergebnisse beziehen sich auf die geprüften Produkte. Der Akkreditierungsumfang kann im Internet unter www.skz.de eingesehen werden.

1. Order

The Company Sika Services AG, Stuttgarter Straße 117, 72574 Bad Urach, GERMANY, instructed SKZ - Testing GmbH by e-mail of 7 November 2019 to assess the staining of substrates by the joint sealant **Sikaflex® PRO-3 Purform** according to ISO 16938-1: 2012-12.

2. Test material

The SKZ - Testing GmbH received the following samples for testing (description is based on inspection of the samples at SKZ - Testing GmbH and on the manufacturer's data):

10 cartridges one-component sealant

Designation:	Sikaflex® PRO-3 Purform
Type (chemical family):	---
Colour:	Grey
Batch number:	3004406492
Sample receipt:	2020-01-21

3. Test procedure

The test of the one-component sealant **Sikaflex® PRO-3 Purform** was performed in accordance with ISO 16938-1: 2012-12.

Usually we carry out tests according to standards for which we have an accreditation. The list of all standards for which we are accredited is shown on the homepage at www.skz.de. In case of non-accredited procedures they are marked with *.

Unless indicated otherwise, preconditioning and test procedure was performed at standard conditioning atmosphere 23/50, class 1 according to DIN EN ISO 291: 2008-08.

Production and pre-treatment of test specimens

As test specimens, Bianco Carrara with dimensions 12 x 25 x 70 mm was used as contact material. The test specimens were produced without primer.

The test specimens were pre-treated according to ISO 16938-1: 2012-12, 28 days at $(23 \pm 2) ^\circ\text{C}$ and $(50 \pm 5) \%$ relative humidity.

After pretreatment, all samples were compressed by 25 % to 9.0 mm.

3.1 Staining after heat aging

The test was carried out in accordance with ISO 16938-1: 2012-12, point 8.2.2 as a storage at $70 ^\circ\text{C}$ ($\pm 2 ^\circ\text{C}$) for a period of 14 days or 28 days.

3.2 Staining after cold aging

The test was carried out in accordance with ISO 16938-1: 2012-12, point 8.2.3 as a storage at $-20 ^\circ\text{C}$ ($\pm 2 ^\circ\text{C}$) for a period of 14 days or 28 days.

3.3 Staining after artificial irradiation

The test was carried out according to ISO 16938-1: 2012-12, point 8.2.4, procedure b) as storage in a weathering device according to ISO 11431: 2003-01, point 8.2.2 with automatic weathering cycle. The storage was carried out over a period of 14 days or 28 days.

Irradiation was also carried out during the sprinkling phase.

Parameters of the weathering device

Device type:	XENO 1200 CPS
Radiation source:	Xenon arc radiation
Filter system:	Simulation of outdoor sunlight
Black standard temperature:	$65 \pm 3 ^\circ\text{C}$
White standard temperature:	$40 - 45 ^\circ\text{C}$
Rel. humidity:	$65 \pm 10\%$
Cycle:	18 min. sprinkling, 102 min. drying period
Irradiance E_{UV} (300 - 400 nm):	$60 \pm 2 \text{ W/m}^2$
Irradiation time:	672 h or 450 h
Total radiation dose equivalent:	approx. 1.3 GJ/m^2 or 0.65 GJ/m^2

After artificial weathering, the test specimens were stored for 24 h in normal climate 23/50, class 1. Subsequently, the staining was evaluated according to ISO 16938-1: 2012-12, point 9.)

4. Test results - Sikaflex® PRO-3 Purform

Substrate	Exposure	Sample-no.	14 days		28 days		
			Minimum stain width in mm	Maximum stain width in mm	Minimum stain width in mm	Maximum stain width in mm	
Bianco Carrara withe	70 °C	1	A	0	0	0	0
			B	0	0	0	0
		2	A	0	0	0	0
			B	0	0	0	0
	-20 °C	1	A	0	0	0	0
			B	0	0	0	0
		2	A	0	0	0	0
			B	0	0	0	0
	Xenon (wet exposure)	1	A	0	0	0	0
			B	0	0	0	0
		2	A	0	0	0	0
			B	0	0	0	0