



valid until: May 8, 2031

Fraunhofer

TESTED[®] DEVICE

Sika Deutschland CH AG & Co. KG

Sikaflex-522

Report No. SI 2603-1742

DUPLICATE

Statement of
Qualification

Single product
Outgassing Behavior
VOC/SVOC

Statement of Qualification · Single product

Customer Sika Deutschland CH AG & Co. KG
Stuttgarter Strasse 117
72574 Bad Urach
Germany

Tested product

Category: Materials

Subcategory: Lubricants/Sealants/Adhesives

Product name: Sikaflex-522
(manufacturing date: 7/2025; color: white; article number: 634863; batch number: 3010344429; surface: 0.001 m²; thickness thin-film: approx. 1 mm)

Emission chamber measurements with purge-and-trap thermodesorption method and gas chromatography combined with mass spectrometry (TD-GC/MS)

Standards/guidelines: ISO 14644-8, -15
The norms stated generally refer to the version valid at the time of the tests.

Test equipment:

- Measuring station: PerkinElmer Clarus 680, Clarus SQ8, ATD 650
- Sampling chamber:Markes International µCTE

Sample storage:

- Age of sample: 5 and 30 days
- Pre-conditioning:
 - Cleanroom Air Cleanliness Class (according to ISO 14644-1): ISO 1
 - Airflow velocity: 0.45 m/s
 - Airflow type: vertical laminar flow
 - Temperature: 22 °C ± 0.5 °C
 - Relative humidity: 45 % ± 5 %
 - Purified air: VOC-filtered

Test procedure parameters:

- Retention range (VOC): C6 to C16
- Outgassing test temperature: 23 °C

Test result / Classification

The outgassing behavior of the structural adhesive Sikaflex-522 at the stated temperature was investigated according to ISO 14644-15:

results for thin-film coating are not transferable to other or thicker coatings		
Contaminant Category (x)	SER _a ¹⁾ 23 °C, 5 days [g/(m ² *s)]	SER _a ¹⁾ 23 °C, 30 days [g/(m ² *s)]
VOC	5.0 x 10 ⁻⁸	2.0 x 10 ⁻⁹
SVOC ²⁾	2.4 x 10 ⁻⁸	2.4 x 10 ⁻⁸
Sum of VOC and SVOC	7.3 x 10 ⁻⁸	2.6 x 10 ⁻⁸
Refractories ³⁾	6.3 x 10 ⁻¹⁰	< 2.8 x 10 ⁻¹⁰
Siloxanes ⁴⁾	6.3 x 10 ⁻¹⁰	< 2.8 x 10 ⁻¹⁰

¹⁾ The emission rate is calculated using the detected mass based on the response of the standard, the analyzed unit and the sampling duration.
²⁾ according ISO 16000-25, SVOC is the sum of airborne and condensing SVOC. Condensing SVOC were collected by heating the emission chamber to 90 °C after removal of the sample.
³⁾ Refractories are compounds containing elements other than C, H and O (for example S, P, N, Si, ...).
⁴⁾ Siloxanes and other Si-containing organic substances. Siloxanes also count as refractories.

Please note: The tests were conducted on so-called "thin-film coating" samples in accordance with the customer's specifications. Because the curing of outgassing samples is dependent on film thickness, the results cannot be extrapolated to other or thicker coatings.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

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