Cleanroom (atmospheric)

valid until: May 8, 2031

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DEVICE

Sika Deutschland CH AG & Co. KG
Sikaflex-522
Report No. SI 2603-1742

Statement of
Qualification

Single product
Outgassing Behavior
Inorganic Acids

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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 gas impingement in combination with ion chromatography (IC)

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:.....Metrohm Professional IC 850
- 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: Outgassing test temperature:.....23 °C

Test result / Classification

The outgassing behavior of 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/(m²*s)]	**SER_a [1] 23 °C, 30 days** [g/(m²*s)]
Fluoric acid (HF)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}
Hydrochloric acid (HCl)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}
Hydrobromic acid (HBr)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}
Nirtric acid (HNO_3)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}
Phosphoric acid (H_3PO_4)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}
Sulfuric acid (H_2SO_4)	< 2.9 x 10^{-9}	< 2.9 x 10^{-9}

[1]The emission rate is calculated using the detected concentration based on the external standard calibration, the analyzed sample surface area or number of samples, the volumne of the impingement solution and the sampling duration.

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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on behalf of
Dr.-Ing. Frank Bürger, head of business unit Testing and Certification

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under **www.tested-device.com**.