



# Cleanroom<sup>®</sup> Suitable Materials

Sika AG  
Report No. SI 1008-533

Sikafloor-381 AS  
Particle (vs. PA6): ISO 1  
TVOC (23°C/90°C): ISO -9.6 / tested

## Flooring & Coating

DUPLICATE

Statement of  
Qualification

# Statement of Qualification

**Customer:** Sika Deutschland GmbH  
Kornwestheimerstraße 103-107  
70439 Stuttgart  
Germany

**Material tested:** Sikafloor-381 AS RAL 7032  
Detailed test information regarding the sample (serial number, color, batch number, etc.), environment and parameters used, can be obtained from the CSM test report number SI 1008-533 issued by the Fraunhofer-Gesellschaft.

**Tests performed (in accordance with CSM procedures):**

- 1) Particles:  
Measurement of particle emission (airborne) from material when subjected to friction
- 2) Outgassing:  
TVOC (C6 to C16)

**Test parameters:**

- 1) Reel-on-disc test vs. PA6; normal force 300N
- 2) Purge-and-Trap thermodesorption in combination with gas chromatography and mass spectrometry (TD-GC/MS); test sample storage time: 30 days

**Test results / Classification:**

- 1) The level of particulate contamination emitted during application of tribological stress on the material pairing specified lies within the permissible values of the corresponding Air Cleanliness Classes in accordance with ISO 14644-1.

Material pairing	Air Cleanliness Class
Sikafloor-381 AS RAL 7032	Class 4 (ISO 14644-1)

- 2) For the given test temperatures and substance classes, the quantity of substances outgassed from the test material over 1 second lies within the ISO AMC class stated in ISO 14644-8 for a reference volume of 1 m<sup>3</sup> and assuming a supposed test surface area of 1 m<sup>2</sup>.

Test temperatures	Substance class / Outgassing rate / AMC class
23 °C / 73 °F	TVOC / <math>2.8 \times 10^{-10}</math> g/m <sup>2</sup> s / -9.6
90 °C / 194 °F	Amines: 0x10 <sup>-9</sup> g/m <sup>2</sup> s Organo-phosphates: 0x10 <sup>-9</sup> g/m <sup>2</sup> s Siloxanes: 0x10 <sup>-9</sup> g/m <sup>2</sup> s Phthalates: 0x10 <sup>-9</sup> g/m <sup>2</sup> s

**Standards used for the qualification:**

Each standard stated refers to the version valid at the time of testing.

- 1) ISO 14644-1
- 2) ISO 14644-8, ISO 16000-6, 16000-9, 16000-11

**Test environment:**

- 1) Cleanroom fulfilling Air Cleanliness Class ISO Class 1 Specifications (in accordance with ISO 14644-1);  
Vertical unidirectional air flow from ceiling to floor,  
Air flow velocity: 0.45 m/s; Temperature: 71.6 °F ± 0.9 °F,  
Relative humidity: 45 % ± 5 %
- 2) Climate-controlled laboratory conditions

**Declaration:**

The measuring equipment used for the qualification is regularly calibrated and is based on national and international standards. In the case where no national standards exist, the measuring procedure used corresponds with technical regulations and norms valid at the time of the measurement. The documents drawn up for this procedure are available for viewing.

The validity of this statement is temporary indefinite and limited to the named product. It can be verified under [www.tested-device.com](http://www.tested-device.com). For more CSM information, visit our website at [www.ipa-csm.com](http://www.ipa-csm.com).

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