

Report No. SI 1008-533

Cleanroom® Suitable Materials

Sikafloor-381

Particle (vs. PA6): ISO 1

TVOC (23°C/90°C): ISO -9.6 / tested

Flooring & Coating

OUPLICATE

Statement of Qualification





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Customer:

Material tested:

Tests performed (in accordance with CSM procedures):

Test parameters:

Test results / Classification:

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Sikafloor-381 RAL 7035

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.

1) Particles:

Fraunhofer

Measurement of particle emission (airborne) from material when subjected to friction

2) Outgassing: TVOC (C6 to C16)

- 1) Reel-on-disc test vs. PA6; normal force 300 N
- 2) Purge-and-Trap thermodesorption in combination with gas chromatography and mass spectrometry (TD-GC/MS); test sample storage time: 30 days
- 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 RAL 7035 vs. PA6	Class 1 (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 m³ and assuming a supposed test surface area of 1 m².

Test temperatures	Substance class / Outgassing rate / AMC class	
23°C / 73°F	TVOC / <2.8x10 ⁻¹⁰ g/m ² s / -9.6	
90°C / 194°F	Amines: Organo-phosphates: Siloxanes: Phthalates:	0x10 ⁻⁹ g/m ² s 0x10 ⁻⁹ g/m ² s 0x10 ⁻⁹ g/m ² s 0x10 ⁻⁹ g/m ² s

Standards used for the qualification:

Test environment:

Declaration:

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

- 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: $0.45 \,\text{m/s}$; Temperature: $71.6 \,^{\circ}\text{F} \pm 0.9 \,^{\circ}\text{F}$, Relative humidity: 45 % ± 5 %
- 2) Climate-controlled laboratory conditions

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. For more CSM information, visit our website at www.ipa-csm.com.

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