



FS-BF GmbH & Co. KG
Report No. FS 1711-963

Cleanroom[®] Suitable Materials

Cleanroom Silicon PX 9419.1
Outgassing VOC/SVOC
ISO-ACC_m Class -5.4 / -7.5

FLOORING & COATING

Outgassing Behavior VOC/SVOC

Qualification Certificate

We hereby certify that the material stated above, provided by

FS-BF GmbH & Co. KG
 Reichshof - Hahn, Germany

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number FS 1711-963.

The outgassing behavior of Cleanroom Silicon PX 9419.1 (ivoire) at the stated temperatures was investigated according to VDI 2083 Part 17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding Contaminant Category:

Contaminant Category (x)	SER _a ¹⁾ 23 °C [g/m ² s]	SER _a ¹⁾ 90 °C [g/m ² s]	ISO-ACC _m Class (x) based on 23 °C
VOC	4.3 x 10 ⁻⁶	1.3 x 10 ⁻⁵	-5.4
SVOC	3.1 x 10 ⁻⁸	3.4 x 10 ⁻⁷	-7.5
Amines	< 2.8 x 10 ⁻¹⁰	7.4 x 10 ⁻⁹	--
Organophosphates	< 2.8 x 10 ⁻¹⁰	< 4.6 x 10 ⁻⁹	--
Siloxanes	1.3 x 10 ⁻⁶	5.6 x 10 ⁻⁶	--
Phthalates	< 2.8 x 10 ⁻¹⁰	< 4.6 x 10 ⁻⁹	--

¹⁾SER_a: Area-specific emission rate

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.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

DUPLICATE

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Stuttgart, February 14, 2018
 Place, date of first document issued

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 Place, current date

on behalf of 
 Dr.-Ing. Udo Gommel, Project manager Fraunhofer IPA