



Cleanroom[®] Suitable Materials

Forbo Novilon
Report No. FO 2004-1170

Sphera EC
Outgassing VOC/SVOC
ISO-ACC_m Class < -9.6 / < -9.6

FLOORING & COATING

Single product
Outgassing Behavior
VOC/SVOC

Qualification Certificate

We hereby certify that the material stated above, provided by

Forbo Novilon B.V.
Coevorden, the Netherlands

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number FO 2004-1170.

The outgassing behavior of the Sphera EC (450000) at the stated temperatures was investigated according to VDI 2083 Part 17 and ISO 14644-15. 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	2) not detectable	4.4 x 10 ⁻⁷	< -9.6
SVOC		9.4 x 10 ⁻⁸	< -9.6
Amines		5.0 x 10 ⁻⁸	--
Organophosphates	3) not detectable		--
Siloxanes			--
Phthalates			--

¹⁾SER_a: Area-specific emission rate ²⁾detection limit: 2.8 x 10⁻¹⁰ ³⁾detection limit: 1.7 x 10⁻⁹

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.

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Report No. current document

Stuttgart, July 3, 2020
Place, date of first document issued

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Place, current date

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