



Forbo-Novilon B.V.
Report No. FO 2207-1329

Cleanroom[®] Suitable Materials

Sphera Element
Outgassing Inorganic Acids
ISO-ACC_m Class < -8.5

FLOORING & COATING

Single product Outgassing Behavior Inorganic Acids

Qualification Certificate

We hereby certify that the material stated above, provided by

Forbo-Novilon B.V.
 KA Coevorden, The Netherlands

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number FO 2207-1329.

The outgassing behavior of Sphera Element homogeneous vinyl (color: shell) 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
HF	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5
HCl	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5
HBr	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5
HNO ₃	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5
H ₃ PO ₄	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5
H ₂ SO ₄	< 2.9 x 10 ⁻⁹	< 2.9 x 10 ⁻⁹	< -8.5

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.

FO 2207-1329
 Report No. first document
 --
 Report No. current document

Stuttgart, September 23, 2022
 Place, date of first document issued
 --
 Place, current date

on behalf of 