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DEVICE

SHIELD Scientific B.V.
White Nitrile 400 DI+
Report No. SH 1507-773

DUPLICATE

Statement of
Qualification

Outgassing Behavior

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Statement of Qualification

Customer

SHIELD Scientific B.V.
Dr. Willem Dresslaan 1
6721 ND Bennekom
The Netherlands

Component tested

Category:	Materials
Subcategory:	Consumables
Product name:	SHIELDskin Xtreme White Nitrile 400 DI+ (manufacturing date: 10/2014; Lot: 4K20 1609B)

Emission chamber measurements with purge-and-trap thermodesorption method and gas chromatography combined with mass spectrometry (TD-GC/MS)

Standards/Guidelines:	ISO 14644-8; ISO 16000-6, -9, -11, -25; VDI 2083-17 The norms stated refer to the relevant editions applicable at the time of the tests.
Testing equipment:	• Measuring station:.....PerkinElmer Clarus 600, Clarus 600T, ATD 650 • Sampling chamber:.....Markes International µCTE
Sample storage:	Age of sample:.....Measurement directly after unpacking
Test parameters used:	• Retention range:.....VOC (C6 to C16) • Outgassing test temperatures:.....23 °C

Test result / Classification

The outgassing behavior of the named material at the stated temperatures was investigated according to VDI 2083-17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding contaminant group:

Test temperature	Contaminant group	Specific emission rate [g/m²s]	ISO-ACC$_c$ Class (x)
23 °C	VOC	< 2.8 x 10^{-10}	< -9.6

The detection limit at the time of the test was ISO-ACC$_c$ Class = -9.6 (VOC). The ISO-ACC$_c$ Class (x) was assigned for the named contaminant group x at the test temperature of 23 °C (room temperature).

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

For further information about the test environment and parameters, please refer to the Fraunhofer IPA test report.

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Place, date of first document issued

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Place, current date

i. A.
Udo Gommel, Project Manager Fraunhofer IPA

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