valid until: January 25, 2028

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TESTED®
DEVICE

item Industrietechnik
Castor D75 swivel
Report No. IT 2207-1335

Statement of
Qualification

Single product
Outgassing Behavior
VOC/SVOC

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Statement of Qualification · Single product

Customer

item Industrietechnik GmbH
Friedenstrasse 107-109
42699 Solingen
Germany

Component tested

Category: Cleanroom facilities

Subcategory: Wall / Ceiling / Floor / Door

Product name: Castor D75 swivel with double-brake ESD
(manufacturing date: 2022; color: grey; article number: 0.0.420.17)

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

Standards / Guidelines: ISO 14644-8, -15; ISO 16000-6, -9, -11, -25
The norms stated generally refer to the version valid at the time of the tests.

Testing equipment: Measuring station: ..... PerkinElmer Clarus 600, Clarus SQ8, ATD 650

Test procedure parameters:

- Retention range (VOC): ..... C6 to C16
- Outgassing test temperatures: ..... 23 °C
- Duration of preconditioning: ..... > 10 h
- Flow rate sampling gas: ..... 10 l/h
- Duration of sampling: ..... 1 h
- Volume of the emission cell: ..... 10 l
- Emission cell material: ..... stainless steel

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Test result / Classification

The outgassing behavior of the Castor D75 swivel with double-brake ESD at the stated temperatures was investigated according to ISO 14644-15. Based on the outgassing rates determined for the specific equipment, the following material classification was made for the corresponding Contaminant Category:

Contaminant Category (x)	SER_u [1] 23 °C [g/unit·s]	ISO ACC_e Class (x) based on 23° C
VOC	6.0×10^{-10}	**-9.2**
SVOC	6.4×10^{-12}	**-11.2**
Amines	$< 2.8 \times 10^{-13}$	--
Organophosphates	$< 2.8 \times 10^{-13}$	--
Siloxanes	$< 2.8 \times 10^{-13}$	--
Phthalates	$< 2.8 \times 10^{-13}$	--

[1] SER_u: Unit-specific emission rate

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.

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

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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on behalf of
Dr.-Ing. Frank Bürger, Project Manager Fraunhofer IPA

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**.