



**Fraunhofer**

**TESTED<sup>®</sup>  
DEVICE**

Hydroflex OHG  
PurMop MLB40  
**Report No. HY 1404-705**

DUPLICATE

Statement of  
Qualification

Particle Emission

# Statement of Qualification

**Customer:** Hydroflex OHG  
Am Weidenhäuser Bahnhof 10  
35075 Gladenbach  
Germany

**Component tested**

Category: Working Place and Operator

Subcategory: Work Equipment

Product name: Mop cover PurMop MLB40  
(manufacturing date: 02/2013; color: white/blue; Lot-No.: 113006)

**Test result / Classification:** When dry and under the specified test conditions, the mop cover PurMop MLB40 fulfills the requirements up to air cleanliness class 5 in accordance with ISO 14644-1. This is equivalent with ACP<sub>c</sub> class 5 according to VDI 2083 part 9.2 (in preparation).

## Random sampling of particle emissions (airborne) at representative sites

Standards/Guidelines: Based on VDI 2083-9.1, without 24-hour running-in period.  
The norms stated refer to the relevant editions applicable at the time of the tests.

Test devices: Optical particle counter:  
LasAir II 110 with measuring ranges  $\geq 0.1 \mu\text{m}$ ,  $\geq 0.2 \mu\text{m}$ ,  $\geq 0.3 \mu\text{m}$ ,  $\geq 0.5 \mu\text{m}$ ,  $\geq 1.0 \mu\text{m}$  und  $\geq 5.0 \mu\text{m}$

Test environment parameters:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Airflow velocity:..... 0.45 m/s
- Airflow pattern:..... Vertical laminar flow
- Temperature:.....  $22^\circ\text{C} \pm 0.5^\circ\text{C}$
- Relative humidity: .....  $45\% \pm 5\%$

Test procedure parameters:

Test bench (according to ISO 9073-10)

- Motion cycle:
  - Linear compression s:..... 120 mm
  - Torsion:.....  $180^\circ$
- Cycle time t: ..... 1 s
- Sampling chamber:..... None
- Duration of stress applied to test piece: ..... 100 min
- Distance between particle counting probe and test piece:..... 130 mm

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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i. A.   
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