



# Fraunhofer

## TESTED<sup>®</sup> DEVICE

Pfennig Reinigungstechnik GmbH  
MicroMop Ultra CR/A  
**Report No. PF 2503-1605**

Single product  
**Particle Emission  
in Cleanroom  
(atmospheric)**

### Qualification Certificate

This is to certify that the product mentioned above, provided by

**Pfennig Reinigungstechnik GmbH**  
Durach, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE  
bearing the report number PF 2503-1605.

When operated in a dry state under the specified test conditions  
(room temperature:  $22^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ ; relative humidity:  $45\% \pm 5\%$ ),  
the MicroMop Ultra CR/A (pre-washed, polyester, blue-multico-  
lored) was assessed in compliance with ISO 14644-14 and VDI  
Part 9.2 is suitable for use in cleanrooms up to the following Air  
Cleanliness Class according to ISO 14644-1:

Test parameter(s)	Air Cleanliness Class
Linear compression = 120 mm Torsion = $180^{\circ}$ Cycle time $t = 1\text{ s}$	4
Overall result	

This corresponds with ISO-ACP<sub>c</sub> Class 4 according to  
VDI 2083 Part 9.2.

Please note: Transport damages, incorrect installation, aging  
behavior etc. can influence the test result.

PF 2503-1605  
Report No. first document

Stuttgart, April 30, 2025  
Place, date of first document issued

--  
Report No. current document

--  
Place, current date

on behalf of   
Dr.-Ing. Frank Bürger, head of business unit Testing and Certification

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](http://www.tested-device.com).

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



**Fraunhofer**  
IPA