



# Fraunhofer

## TESTED<sup>®</sup> DEVICE

ebm-papst Mulfingen  
Impeller Radical PPGF40  
Report No. EB 1703-895

### Outgassing Behavior Ammoniac

### Qualification Certificate

This is to certify that the product mentioned above, provided by  
**ebm-papst Mulfingen GmbH & Co. KG**  
Mulfingen, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE  
bearing the report number EB 1703-895.

The outgassing behavior of the Impeller Radical PPGF40 Size  
400 \* -1-3233 (color: black) at the stated temperatures was investigated according to VDI 2083 Part 17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding substance group:

Substance Group (x)	SER <sup>1)</sup> 23 °C [g/m <sup>2</sup> s]	SER <sup>1)</sup> 90 °C [g/m <sup>2</sup> s]	ISO-ACC <sub>m</sub> class (x) based on 23 °C
NH <sub>3</sub>	2.3 x 10 <sup>-9</sup>	5.0 x 10 <sup>-8</sup>	-8.6

<sup>1)</sup> SER: Surface Specific Emission Rate

The detection limit at the time of the test was ISO-ACC<sub>m</sub> class = -9.2 (NH<sub>3</sub>). The ISO-ACC<sub>m</sub> class (x) was assigned for the named substance group at the test temperature of 23 °C.

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

Stuttgart, April 24, 2017

Place, date of first document issued

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Place, current date

on behalf of   
Frank Bürger, Project manager Fraunhofer IPA

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.

Further information:

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

DUPLICATE