



valid until: May 20, 2031

# Fraunhofer

## TESTED<sup>®</sup> DEVICE

Ziehl-Abegg SE  
ZAmid PAPA LGF40 blue  
**Report No. ZI 2603-1743**

### Single product Outgassing Behavior Inorganic Acids

### Qualification Certificate

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

**Ziehl-Abegg SE**  
Künzelsau, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number ZI 2603-1743.

The outgassing behavior of the ZAmid PAPA LGF40 blue (color: blue) at the stated temperatures was investigated according to ISO 14644-15. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding Contaminant Category:

Contaminant Category (x)	SER <sup>1)</sup> 23 °C [g/(m <sup>2</sup> * s)]	ISO-ACC <sub>m</sub> Class (x)
HF	< 2.9 x 10 <sup>-9</sup>	< -8.5
HCl	< 2.9 x 10 <sup>-9</sup>	< -8.5
HBr	< 2.9 x 10 <sup>-9</sup>	< -8.5
HNO <sub>3</sub>	< 2.9 x 10 <sup>-9</sup>	< -8.5
H <sub>3</sub> PO <sub>4</sub>	< 2.9 x 10 <sup>-9</sup>	< -8.5
H <sub>2</sub> SO <sub>4</sub>	< 2.9 x 10 <sup>-9</sup>	< -8.5

<sup>1)</sup>The emission rate is calculated using the detected concentration based on the external standard calibration, the analyzed sample surface area or number of samples, the volume of the impingement solution and the sampling duration.

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Report No. first document

Stuttgart, November 5, 2020  
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ZI 2603-1743  
Report No. current document

Stuttgart, May 20, 2026  
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 current date the 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.

The norms stated generally refer to the version valid at the time of the tests.