



valid until: March 30, 2028

# Fraunhofer

## TESTED<sup>®</sup> DEVICE

eltherm GmbH  
ELPH-Cleanroom ID 100 mm  
**Report No. EL 2211-1363**

Single product  
Outgassing Behavior  
VOC/SVOC

## Qualification Certificate

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

**eltherm production GmbH**  
Burbach, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE  
bearing the report number EL 2211-1363.

The outgassing behavior of ELPH-Cleanroom ID 100mm at  
room and operating temperature was investigated according to  
VDI 2083 Part 17 and 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 <sub>a</sub> <sup>1)</sup> 23 °C [g/m <sup>2</sup> s] | ISO-ACC <sub>m</sub> Class (x) based on 23 °C | SER <sub>a</sub> <sup>1)</sup> 180 °C [g/m <sup>2</sup> s] | ISO-ACC <sub>m</sub> Class (x) based on 180 °C |
|--------------------------|---|---|--|--|
| VOC                      | 6.9 x 10 <sup>-10</sup>                                   | <b>-9.2</b>                                   | 1.0 x 10 <sup>-7</sup>                                     | <b>-7.0</b>                                    |
| SVOC                     | < 1.3 x 10 <sup>-11</sup>                                 | <b>&lt; -10.9</b>                             | 7.0 x 10 <sup>-8</sup>                                     | <b>-6.2</b>                                    |
| Amines                   | < 1.3 x 10 <sup>-11</sup>                                 | --  | < 7.6 x 10 <sup>-11</sup>                                  | --   |
| Organo-phosphates        | < 1.3 x 10 <sup>-11</sup>                                 | --  | < 7.6 x 10 <sup>-11</sup>                                  | --   |
| Siloxanes                | 5.0 x 10 <sup>-10</sup>                                   | --  | 8.5 x 10 <sup>-9</sup>                                     | --   |
| Phthalates               | < 1.3 x 10 <sup>-11</sup>                                 | --  | < 7.6 x 10 <sup>-11</sup>                                  | --   |

<sup>1)</sup> SER<sub>a</sub>: Area-specific emission rate

EL 1603-812  
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Place, current date

on behalf of 

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**.

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