



valid until: March 30, 2028

# Fraunhofer

## TESTED<sup>®</sup> DEVICE

eltherm GmbH  
ELPH-Cleanroom ID 40 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 40 mm 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	3.2 x 10 <sup>-10</sup>	<b>-9.5</b>	1.4 x 10 <sup>-8</sup>	<b>-7.9</b>
SVOC	< 2.8 x 10 <sup>-11</sup>	<b>&lt; -10.6</b>	2.6 x 10 <sup>-7</sup>	<b>-6.6</b>
Amines	< 2.8 x 10 <sup>-11</sup>	--	< 1.7 x 10 <sup>-10</sup>	--
Organo-phosphates	< 2.8 x 10 <sup>-11</sup>	--	< 1.7 x 10 <sup>-10</sup>	--
Siloxanes	3.2 x 10 <sup>-10</sup>	--	3.5 x 10 <sup>-9</sup>	--
Phthalates	< 2.8 x 10 <sup>-11</sup>	--	< 1.7 x 10 <sup>-10</sup>	--

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

EL 1603-812  
Report No. first document

Stuttgart, May 31, 2016  
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Report No. current document

Stuttgart, March 30, 2023  
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](http://www.tested-device.com).

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