



Fraunhofer

TESTED[®] DEVICE

Ziehl-Abegg SE
PA6-GF30 blue

Report No. ZI 2507-1655

DUPLICATE

Statement of
Qualification

Single product
Outgassing Behavior
VOC/SVOC

Customer	Ziehl-Abegg SE Heinz-Ziehl-Strasse Künzelsau Germany
Tested product	
Category:	Materials
Subcategory:	Plastics
Product name:	PA6-GF30 blue (manufacturing date: 5/2025; color: blue; article number: 00412286)

Emission measurements with purge-and-trap thermodesorption method and gas chromatography combined with mass spectrometry (TD-GC/MS)	
Standards/guidelines:	ISO 14644-8, -15; ISO 16000-25; VDI 2083 Part 17 The norms stated generally refer to the version valid at the time of the tests.
Test equipment:	Measuring station: PerkinElmer Clarus 680, Clarus SQ8, ATD 650
Sample storage:	<ul style="list-style-type: none">Pre-conditioning:<ul style="list-style-type: none">Cleanroom Air Cleanliness Class (according to ISO 14644-1): ISO 1Airflow velocity: 0.45 m/sAirflow type: vertical laminar flowTemperature: 22 °C ± 0.5 °CRelative humidity: 45 % ± 5 %Purified air: VOC-filtered
Test procedure parameters:	<ul style="list-style-type: none">Retention range (VOC): C6 to C16Retention range (SVOC): > C16Temperature during emission sampling: 23 °CPreconditioning time: > 5 minSampling flow rate: 100 ml/minDuration of emission sampling: 60 minVolume of micro emission chamber: 45 cm³

Test result / Classification	The outgassing behavior of PA6-GF30 blue at the stated temperature was investigated according to ISO 14644-15, ISO 16000-25 and VDI 2083 Part 17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding Contaminant Category:
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Contaminant Category (x)	SER _a ¹⁾ 23°C [g/m²·s]	ISO-ACC _m Class (x)
VOC	4.7 x 10 ⁻⁹	-8.3
SVOC ²⁾	< 2.8 x 10 ⁻¹⁰	< -9.6
Sum VOC+SVOC	4.7 x 10 ⁻⁹	--
Refractories ³⁾	< 2.8 x 10 ⁻¹⁰	--
Siloxanes ⁴⁾	< 2.8 x 10 ⁻¹⁰	--

¹⁾ The emission rate is calculated using the detected mass based on the response of the standard, the analyzed unit and the sampling duration.
²⁾ According to ISO 16000-25, SVOC is the sum of airborne and condensable SVOC
³⁾ Refractories are compounds containing elements other than C, H and O (for example S, P, N, Si,...).
⁴⁾ Siloxanes and other organic substances containing silicon. Siloxanes are also classified as refractories.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

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

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Business unit Testing and Certification	ZI 2507-1655 Report No. current document	Stuttgart, November 26, 2025 Place, current date
Nobelstrasse 12 70569 Stuttgart Germany	on behalf of Dr.-Ing. Frank Bürger, head of business unit Testing and Certification	