



Fraunhofer

TESTED[®]
DEVICE

U.I. Lapp GmbH
ÖLFLEX CLASSIC FD 810
Report No. LA 2509-1671

DUPLICATE

Statement of
Qualification

Single product
Outgassing Behavior
VOC/SVOC

Customer	U.I. Lapp GmbH Schulze-Delitzsch Strasse 25 70565 Stuttgart Germany
Tested product	
Category:	Energy Supply
Subcategory:	Cable Systems
Product name:	ÖLFLEX CLASSIC FD 810 5G1,5 (manufacturing date: week 33/2025; color: gray; article number: 0026152)

Emission measurements with purge-and-trap thermodesorption method and gas chromatography combined with mass spectrometry (TD-GC/MS)	
Standards/guidelines:	ISO 14644-8, -15 The norms stated generally refer to the version valid at the time of the tests.
Test equipment:	Measuring station:PerkinElmer Clarus 600, Clarus SQ8, ATD 650
Test procedure parameters:	- Retention range (VOC): C6 to C16 - Outgassing test temperatures: 23 °C - Duration of preconditioning:> 10h - Flow rate purge gas: 0.01 m³/h - Flow rate sampling gas: 10l/h - Duration of sampling:..... 1 h - Air change rate:..... 1/h - Emission cell material:.....stainless steel

Test result / Classification	The outgassing behavior of the cable system ÖLFLEX CLASSIC FD 810 5G1,5 at the stated temperature was investigated according to ISO 14644-15. Based on the outgassing rates determined for the specific equipment, the following material classification was made for the corresponding Contaminant Category:
------------------------------	---

Contaminant Category (x) Kontaminantenfamilie (x)	SER _y 23°C ¹⁾ [g/unit · s]	ISO-ACC _m Class (x) ISO-ACC _m -Klasse (x)
VOC	7.4 x 10 ⁻¹⁰	-9.1
SVOC ²⁾	2.3 x 10 ⁻¹²	-11.6
Sum of VOC and SVOC Summe aus VOC und SVOC	7.5 x 10 ⁻¹⁰	--
Refractories Feuerfeste Materialien ³⁾	2.6 x 10 ⁻¹²	--
Siloxanes Siloxane ⁴⁾	2.0 x 10 ⁻¹²	--

¹⁾ The emission rate is calculated using the detected mass based on the response of the standard, the analyzed unit and the sampling duration
Die Emissionsrate wird anhand der nachgewiesenen Masse auf der Grundlage der Reaktion des Standards berechnet, der analysierten Probenfläche und der Dauer der Probenahme.

²⁾ SVOC are airborne SVOC
SVOC sind luftgetragene SVOC.

³⁾ Refractories are compounds containing elements other than C, H and O (for example S, P, N, Si,...).
Feuerfeste Stoffe sind Verbindungen, die andere Elemente als C, H u. O enthalten (z. B. S, P, N,Si,...).

⁴⁾ Siloxanes and other Si-containing organic substances. Siloxanes also count as refractories.
Siloxane u. andere Si-haltige organische Stoffe. Siloxane zählen auch zu den feuerfesten Materialien.

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.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA	LA 2509-1671 Report No. first document	Stuttgart, November 13, 2025 Place, date of first document issued
Business unit Testing and Certification	-- Report No. current document	-- Place, current date
Nobelstrasse 12 70569 Stuttgart Germany	on behalf of  Dr.-Ing. Frank Bürger, head of business unit Testing and Certification	