

# Certificate

# Nr. 19310

## Outgassing of thermal insulation materials in solar-thermal flatplate collectors with AR coated glass

**Ordered by:**

URSA Slovenija, d.o.o.  
Povhova ulica 2  
SI-8000 Novo mesto  
Slovenija

**Manufacturer:**

URSA Slovenija, d.o.o.  
Povhova ulica 2  
SI-8000 Novo mesto  
Slovenija

Represented by Mr. Joze Kozjancic

**Test sample:**

TF R2 V

**Description of the test sample:**

Glasswool  
With black facing  
specific weight = 22.2 kg/m<sup>3</sup> \*  
thickness approx. = 50 mm \*

\* = measured by SPF (not pressed)

\*\* = measured by SPF (50 Pa)

\*\*\* = manufacturer information (50 Pa)



Picture of tested sample

**Test conditions:**

Test temperature: 220°C  
with analysis of effect on antireflective coated glass

**Delivery of sample:**

24.1.2019

**Validity of certificate:**

6.2.2019 - 5.2.2022

**Realisation of the test:**

Start 30.1.2019 , according to test instruction, see [www.spf.ch](http://www.spf.ch)

**Evaluation:**

Based on Testreport **AusgBer\_19310** from 6.2.2019

Sample 1 = v1 / t2

Sample 2 = v1 / t2 Therefore, the sample has successfully passed the test.

**Limitation of liability:**

Our GTC apply, see [www.spf.ch/docu/en/](http://www.spf.ch/docu/en/)

Rapperswil, 20.3.2019

Felix Flückiger