



**Thermal Conductivity according to EN ISO 8497:1996**

Test report No: G2-18-1374-06

**Applicant:** Evocell S.r.l., 61022 TALACCHIO DI COLBORDOLO (PU), Italy  
**Manufacturing plant:** Evocell S.r.l., 61022 TALACCHIO DI COLBORDOLO (PU), Italy  
**Name of product:** It-Flex C1 / Polyflex C1  
**Declared values:** Inner diameter: 28 mm Thickness: 32 mm Length: --- Density: ---  
**Description:** (as given by applicant) Tube made of flexible elastomeric foam (FEF) according to EN 14304:2009+A1:2013  
**Sampling:** Sent by applicant  
**Sample receipt:** WE18-4032 on May 18, 2018 (internal no. 02)  
**Test equipment:** Testing apparatus with calculated pipe ends according to EN ISO 8497:1996 in ambient air Diameter 29.0 mm, length 2000 mm, horizontal  
**Preparation:** Measured values according to EN 13467 and EN 13470 (as delivered):  
 Inner diameter: --- Thickness of insulation: --- Length: ---  
 Density: ---  
**Mounting:** (acc. to DIN 4140:2014) Inner diameter: 29.2 mm Thickness of insulation: 30.8 mm Length: 2290 mm  
 Density: \*) 42.7 kg/m<sup>3</sup> Mass: 0.568 kg  
 Start of testing: Jun 22, 2018  
**Remark:** The specimens were built on the test pipe in state of delivery.  
**Measured values:** Test protocol No: G2-18-1374:0002:02

Test No.	Heat flow W	Temperature of the		Temperature-difference of the specimen K	Mean temperature of the specimen °C	Thermal conductivity W/(m·K)
		Warm side °C	Cold side °C			
01	8.50	15.2	-6.9	22.1	4.1	0.0348
02	8.49	33.4	12.2	21.2	22.8	0.0364
03	8.47	57.5	37.1	20.4	47.3	0.0379

Uncertainty: < 3 % Thermal conductivity at a given temperature difference on the specimen.

**Dismounting:** Properties of the material after measurement up to 57.5 °C warm side temperature:  
 Density: \*) 42.7 kg/m<sup>3</sup> Mass: 0.568 kg Change in mass: 0.0 %  
 End of testing: Jun 27, 2018

Remark: ---

\*) The given values of density refer to the insulation of the mounted specimens without coating/facing.

**Evaluation:**

Polynomial:  $\lambda(\vartheta_m) = + 3.4676E-02 + 6.8917E-05 \cdot \vartheta_m$

Mean temperature $\vartheta_m$ in °C	0	20	40	---	---	---	---	---	---	---
Thermal conductivity $\lambda$ in W/(m·K)	0.035	0.036	0.037	---	---	---	---	---	---	---

These thermal conductivity values refer to the material in a dry state under the given experimental conditions at the time of the measurement and are related to the mean temperature of the specimen.

Remark: ---

Gräfelfing, Jul 03, 2018

Department Specialist:

*R. Hofmockel*

R. Hofmockel, M.Sc.



Tester:

*S. Tana*

S. Tana

Results relate only to the items tested.

The test report shall not be reproduced except in full, without written approval of FIW München.