

## Thermal Conductivity according to EN 12667

Test report No: F.2-1345a/11

**Applicant:** L'ISOLANTE K-FLEX S.r.L., 20040 Roncello (Mi), Italien  
**Name of the product:** " K-Flex ST DUCT "  
**Product identification:** Adhesive sheets with reinforced mesh made of flexible elastomeric foam.  
 (as given by applicant) Thickness: 10 mm  
**Sampling:** Sent by applicant in April 2011  
**Goods Receipt:** No. 4199 dated 14.04.2011  
**Test equipment:** Guarded hot plate apparatus according to EN 12667:  
 Metering section 400 x 400 mm with guard section 800 x 800 mm  
**Preparation:** Tested thickness<sup>+)</sup> : 0.0195 m Mass<sup>+)</sup> : 0.2880 kg  
 Surface area tested: 0.2505 m<sup>2</sup> Density<sup>+)</sup> : 59.0 kg/m<sup>3</sup>  
**Remarks:** The specimens were built into the test apparatus in 2-layers without further conditioning.

**Experimental data:**

Test No	Heat flow rate W	Temperature of the		Average temperature of the specimen °C	Temperature-difference of the specimen K	Thermal Conductivity W/(m·K)
		Warm Side °C	Cold Side °C			
1	10.790	-19.0	-40.5	-29.8	21.5	0.0307
2	9.420	8.4	-9.0	-0.3	17.4	0.0330
3	7.674	36.7	23.6	30.2	13.1	0.0357
4	7.649	64.6	52.8	58.7	11.8	0.0396
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Uncertainty: < 2%

Properties of the material after conductivity-measurement up to 64.6 °C warm side:

<sup>+)</sup>  Mean values (two specimens)

Thickness<sup>+)</sup> : 0.0195 m Mass<sup>+)</sup> : 0.2880 kg  
 Density<sup>+)</sup> : 59.0 kg/m<sup>3</sup> Change in mass: 0.0 %

Remarks: --

**Results:**

Mean temperature °C	-30	-20	0	20	40	60	---	---	---
Thermal conductivity W/(m·K)	0.030	0.031	0.033	0.035	0.037	0.039	---	---	---

**Evaluation:** These thermal conductivity values refer to the material in a dry state and represent thermal conductivity values  $\lambda_{Lab,P}$  as specified in the guidelines VDI 2055.

Final remarks: -----

Gräfelfing, 16.08.11

Department Specialist  
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Tester  
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 A. Bergler

The only valid document is the one in German and not this translation. Test results only refer to test objects. The prior written consent of our Institute is required for any publication or reference concerning parts of this report.