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Deutsche
Akkreditierungsstelle
D-PL-11217-01-00

Die Akkreditierung gilt für die in der Urkundenanlage
D-PL-11217-01-00 aufgeführten Prüfverfahren.

Project: Determination of the thermal conductivity according to EN 12664:2001
of a water-based acrylic insulation coat

Plant ^{a)}: HEGSEL GmbH, Düsseldorf

Order date: 19th May 2025

Request for testing ^{a)}: Determination of the thermal conductivity according to EN 12664:2001
of a water-based acrylic insulation coat

Sample description ^{a)}: HEGSEL® Therm 4410, Advanced Acrylic Water-Borne
Insulation Coating, free film with base area 528 x 527 mm²

Number of samples: 1

Sample(s) taken: Delivery in responsibility of the client

Sample(s) received: 22nd May 2025

Test period: May – June 2025

Berlin, 10th June 2025

Translation provided by Kiwa GmbH, MPA Berlin-Brandenburg. In case of doubts, the German original
shall be consulted.



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Project engineer

1. General

Kiwa GmbH, MPA Berlin-Brandenburg, was commissioned by HEGGEL GmbH to carry out the testing of the thermal conductivity of the water-based acrylic insulation coat

“HEGGEL® THERM 4410”

according to EN 12664:2001 (German version).

2. Test results

2.1 Determination of the thermal conductivity

Manufacturing, storage and testing conditions:

Test basis:	EN 12664:2001 (German version)
Tests on:	“HEGGEL® THERM 4410”
Testing device:	Guarded hot plate Lambda-Meter EP500e
Base area of the specimen:	(528.8 x 527.1) mm ²
Conditioning:	(23 ± 2) °C / (50 ± 5) % rel. humidity until mass consistency
Testing conditions:	Testing pressure 1,000 Pa Mean temperature difference between cold and warm specimen surface $\Delta T = 15$ K Mean measuring temperature $T = 10$ °C Followed by drying at (105 ± 5) °C until mass consistency

Test results:

Table 1 Results of the thermal conductivity of “HEGGEL® THERM 4410”

Product		“HEGGEL® THERM 4410”
Thickness of the specimen	[mm]	8.33
Bulk density of the specimen (moist, 23°C/50% rel. LF)	[kg/m³]	232.6
Bulk density of the specimen (dry)	[kg/m³]	227.8
Mass change during testing	[wt.%]	-0.06
Moisture content of the specimen	[wt.%]	2.12
Heat flux density q	[W/m²]	60.24
Thermal insulance R	[m²K/W]	0.249
Thermal conductivity $\lambda_{23/50}$ at 10 °C mean temperature ¹⁾	[W/(m·K)]	0.0335 ± 0.0003

¹⁾ with device-related measurement accuracy < 1 %

- End of test report -

^{a)} Information from the client. ^{k)} Change / addition.

²⁾ The conformity statement is made according to the requirements of the specifications mentioned and according to the first binary Kiwa decision rule with the corresponding level of trust.

This assessment is a pure statement of conformity by the testing body. It does not replace the subsequent assessment and evaluation of the certification body or the confirmation of conformity.