## **Declaration of Performance**



## T4305GPCPR

## 1. Unique identification code of the product-type:

WM 680 GG, Power-tek WM 680 GGN, WM 680 GS, Power-tek WM 680 GSN, WM 680 S, Power-tek WM 680 SSN, WM 680 ALU GG, Power-tek WM 680 GGA, WM 680 ALU GS, Power-tek WM 680 GSA, WM 680 ALU S, Power-tek WM 680 SSA

### 2. Intended use or uses:

Thermal Insulation products for building equipment and industrial installations

### 3. Manufacturer:

Knauf Insulation d.o.o.

Varaždinska 140, 42220 Novi Marof

Croatia

www.knaufinsulation.com - dop@knaufinsulation.com

### 4. Authorised representative:

Not applicable

## 5. System or systems of assessment and verification of constancy of performance:

AVCP System 1 for Reaction to Fire

AVCP System 3 for the other characteristics

#### 6a. Harmonized Standard:

EN 14303:2009 + A1:2013

### Notified body or bodies:

AVCP System 1: Forschungsinstitut für Wärmeschutz e. V. München FIW München (Notified certification

body No. 0751)

AVCP System 3: Forschungsinstitut für Wärmeschutz e. V. München FIW München (Notified certification

body No. 0751)

## 6b. European Assessment document: not applicable

European Technical Assessment: not applicable Technical Assessment Body: not applicable

Notified body/ies: not applicable

## 7. Declared Performances:

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# T4305GPCPR WM 680 ALU GG, Power-tek WM 680 GGA



Essential Characteristics	T4305GPCPR			Harmonised Technical	
	Performance		WM 680 ALU GG, Power- teK WM 680 GGA	Standard	
Reaction to fire	Reaction to fire		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption		NPD		
Water Permeability	Water Absorption		WS1		
Water Vapour Permeability	Water Vapour Diffusion Re	esistance	NPD		
Compressive Strength	Compressive Stress or Compressi Flat Products	ve Strength for	or NPD		
Rate of release of corrosive substances	Trace quantities of water-soluble value	ions and the pH-	CL 10	1	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Sub	ostances	NPD		
Continuous glowing combustion	Continuous glowing com	bustion	NPD	1	
Durability of reaction to fire against ageing / degradation	Durability characteris	tics	NPD {b}	-	
Durability of thermal resistance against	Thermal Conductivity		NPD {c}		
ageing/degradation	Dimensional Stability		NPD		
	Maximum service temperature - dimensional stability		680 °C	-	
	Durability characteristics  Durability characteristics		NPD		
Durability of reaction to fire against high temperature			NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}		
temperature	Maximum service temperature - dimensional stability		680 °C		
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2		
	Thermal conductivity (W/mk) at	50	0,04	-	
	Temperature in °C	100	0,047	-	
		200	0,061	-	
		300	0,078	1	
		400	0,098	1	
		500	0,125	1	
		600	0,159	1	
		650	0,179	1	

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# T4305GPCPR WM 680 ALU GS, Power-tek WM 680 GSA



Essential Characteristics	T4305GPCPR			Harmonised Technical	
	Performance		WM 680 ALU GS, Power-teK WM 680 GSA	- Standard	
Reaction to fire	Reaction to fire		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption	1	NPD		
Water Permeability	Water Absorption	l	WS1		
Water Vapour Permeability	Water Vapour Diffusion Re	esistance	NPD		
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products		NPD	-	
Rate of release of corrosive substances	Trace quantities of water-soluble value	ions and the pH-	CL 10		
Release of Dangerous Substances to the indoor environment	Release of Dangerous Sub	ostances	NPD		
Continuous glowing combustion	Continuous glowing com	bustion	NPD		
Durability of reaction to fire against ageing / degradation	Durability characteris	itics	NPD {b}		
Durability of thermal resistance against	Thermal Conductivity		NPD {c}		
ageing/degradation	Dimensional Stability		NPD		
	Maximum service temperature - dimensional stability		680 °C		
	Durability characteristics		NPD		
Durability of reaction to fire against high temperature	Durability characteristics		NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}		
temperature	Maximum service temperature - dimensional stability		680 °C		
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2		
	Thermal conductivity (W/mk) at	50	0,04		
	Temperature in °C	100	0,047		
		200	0,061		
		300	0,078		
		400	0,098		
		500	0,125		
		600	0,159		
		650	0,179		
		NPD	NPD		
	NPD - No performanc		NPD		

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# T4305GPCPR WM 680 ALU S, Power-teK WM 680 SSA



Essential Characteristics	T4305GPCPR			Harmonised Technical	
	Performance		WM 680 ALU S, Power-teK WM 680 SSA	Standard	
Reaction to fire	Reaction to fire		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption	<u> </u>	NPD		
Water Permeability	Water Absorption	l	WS1		
Water Vapour Permeability	Water Vapour Diffusion Re	esistance	NPD		
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products		NPD		
Rate of release of corrosive substances	Trace quantities of water-soluble value	ions and the pH-	CL 10		
Release of Dangerous Substances to the indoor environment	Release of Dangerous Sub	ostances	NPD		
Continuous glowing combustion	Continuous glowing com	bustion	NPD	1	
Durability of reaction to fire against ageing / degradation	Durability characteris	itics	NPD {b}		
Durability of thermal resistance against	Thermal Conductivity		NPD {c}		
ageing/degradation	Dimensional Stability		NPD		
	Maximum service temperature - dimensional stability		680 °C		
	Durability characteristics		NPD		
Durability of reaction to fire against high temperature	Durability characteristics		NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}		
temperature	Maximum service temperature - dimensional stability		680 °C		
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2		
	Thermal conductivity (W/mk) at	50	0,04		
	Temperature in °C	100	0,047		
		200	0,061		
		300	0,078	1	
		400	0,098	1	
		500	0,125		
		600	0,159		
				1	
		650	0,179		

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# T4305GPCPR WM 680 GG, Power-teK WM 680 GGN



Essential Characteristics		Harmonised Technica			
	Performance		WM 680 GG, Power-teK WM 680 GGN	- Standard	
Reaction to fire	Reaction to fire A1		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption	1	NPD		
Water Permeability	Water Absorption	1	WS1	1	
Water Vapour Permeability	Water Vapour Diffusion Re	esistance	NPD	1	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products		NPD		
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value		CL 10		
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances		NPD	-	
Continuous glowing combustion	Continuous glowing com	bustion	NPD	1	
Durability of reaction to fire against ageing / degradation	Durability characteris	stics	NPD {b}	_	
0 100 60	71 10 11		NDD ( )		
Durability of thermal resistance against ageing/degradation	Thermal Conductivity  Dimensional Stability		NPD {c}	-	
	Maximum service temperature - dimensional stability		680 °C	_	
	Durability characteristics  Durability characteristics		NPD	_	
Durability of reaction to fire against high temperature			NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}	_	
temperature	Maximum service temperature - dimensional stability		680 °C	-	
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2	-	
	Thermal conductivity (W/mk) at	50	0,04	-	
	Temperature in °C	100	0,047	-	
		200	0,061	1	
		300	0,078	1	
		400	0,098	1	
		500	0,125	1	
		600	0,159	1	
		650	0,179	1	
		NPD	NPD	1	
	NPD - No performance	e determined		<u> </u>	

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# T4305GPCPR WM 680 GS, Power-teK WM 680 GSN



Essential Characteristics	T4305GPCPR			Harmonised Technical	
	Performance		WM 680 GS, Power-teK WM 680 GSN	- Standard	
Reaction to fire	Reaction to fire		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption	1	NPD		
Water Permeability	Water Absorption	1	WS1		
Water Vapour Permeability	Water Vapour Diffusion Re	esistance	NPD		
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products		NPD		
Rate of release of corrosive substances	Trace quantities of water-soluble value	ions and the pH-	CL 10		
Release of Dangerous Substances to the indoor environment	Release of Dangerous Sub	ostances	NPD		
Continuous glowing combustion	Continuous glowing com	bustion	NPD		
Durability of reaction to fire against ageing / degradation	Durability characteris	stics	NPD {b}		
Durability of thermal resistance against	Thermal Conductivity		NPD {c}		
ageing/degradation	Dimensional Stability		NPD		
	Maximum service temperature - dimensional stability		680 °C		
	Durability characteristics  Durability characteristics		NPD		
Durability of reaction to fire against high temperature			NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}		
temperature	Maximum service temperature - dimensional stability		680 °C		
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2		
	Thermal conductivity (W/mk) at	50	0,04		
	Temperature in °C	100	0,047		
		200	0,061		
		300	0,078		
		400	0,098		
		500	0,125		
		600	0,159		
		650	0,179		
		NPD	NPD		
	NPD - No performance	e determined			

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# T4305GPCPR WM 680 S, Power-teK WM 680 SSN



Essential Characteristics	T4305GPCPR			Harmonised Technica	
	Performance		WM 680 S, Power-teK WM 680 SSN	Standard	
Reaction to fire	Reaction to fire		A1	EN 14303:2009 + A1:2013	
Acoustic Absorption Index	Sound Absorption		NPD		
Water Permeability	Water Absorption	l	WS1		
Water Vapour Permeability	Water Vapour Diffusion R	esistance	NPD		
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products		NPD		
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value		CL 10		
Release of Dangerous Substances to the indoor environment	Release of Dangerous Sul	ostances	NPD		
Continuous glowing combustion	Continuous glowing com	bustion	NPD		
Durability of reaction to fire against ageing / degradation	Durability characteris	tics	NPD {b}		
Durability of thermal resistance against ageing/degradation	Thermal Conductivity		NPD {c}		
	Dimensional Stability		NPD		
	Maximum service temperature - dimensional stability		680 °C		
	Durability characteristics		NPD		
Durability of reaction to fire against high temperature	Durability characteristics		NPD {d}		
Durability of thermal resistance against high	Durability Characteristics		NPD {c}		
temperature	Maximum service temperature - dimensional stability		680 °C		
Thermal Resistance	Dimensions & Tolerances		30 - 120 / T2		
	Thermal conductivity (W/mk) at	50	0,04		
	Temperature in °C	100	0,047		
		200	0,061		
		300	0,078		
		400	0,098		
		500	0,125		
		600	0,159		
		650	0,179		
		NPD	NPD		

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## 8. <u>Appropriate Technical Documentation and / or Specific Technical Documentation:</u>

Not applicable

The performance of the product identified above is in conformity with the set of declared performances.

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for an on behalf of the manufacturer by:

Stjepan Mršić - Plant manager

(Name and function)

Novi Marof - 19-12-17

(Place and date of issue)

#### Footnotes

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<sup>{</sup>a} The requirement on a certain characteristic is not applicable in those Member Stats (MSs) where there are no regulatory requirements on that characteristic for the intended use of the product. In this case, manufacturers placing their products on the market of these MSs are not obliged to determine nor declare the performance of their products with regard to this characteristic and the option 'No performance determined' (NPD) in the information accompanying the CE marking (see ZS.3) may be used. The NPD option may not be used, however, where the characteristic is subject to a threshold level (thermal resistance (thermal conductivity and thickness)).

<sup>(</sup>b) The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the product is related to the organic contents, which cannot increase with

<sup>(</sup>c) Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than attractable is air.

<sup>{</sup>d} The fire performance of mineral wool does not deteriorate with high temperature. The Euroclass classification of the product is related to the organic content, which remains constant or decreases with high temperature.