

CERTIFICATE

Number of certificate: **035-FIW-1-016.0-01**

Holder of certificate: SAGER AG
Dornhügelstrasse 10
5724 Dürrenäsch
Switzerland

Manufacturing plant: SAGER AG
5724 Dürrenäsch
Switzerland

Product: **mineral wool products**

Product description: Factory made mineral wool products acc. to
EN 13162:2012+A1:2015
(details see annex)



035

FIW-1-016.0-01

Certified properties: All properties checked once a year per level or class and nominal value by a notified body during routine tests. Regular sampling of products and monitoring of factory production control by the empowered certification body.

This certificate entitles to use the above conformity mark in connection with the number of certificate **035-FIW-1-016.0-01**. This certificate was first issued on 11.12.2017 and will remain valid as long as the factory production control requirements, the product, and the manufacturing conditions in the plant do not change significantly (but no longer than 10.12.2019).

Gräfelfing, 23 February 2018



Head of Certification Body

W. Albrecht

Dipl.-Ing. (FH) Wolfgang Albrecht

ANNEX to CERTIFICATE

035-FIW-1-016.0-01

Product: **mineral wool products**

Product description: Factory made mineral wool products acc. to EN 13162:2012+A1:2015

Holder of certificate: SAGER AG, Dornhügelstrasse 10, 5724 Dürrenäsch, Switzerland

Manufacturing plant: SAGER AG, 5724 Dürrenäsch, Switzerland

Table 1: Description of the products

Product	short name	Form of supply	Declared value of thermal conductivity λ_D W/(m·K)	Thickness mm	Reaction to fire class	Designation code EN 13162:2012+A1:2015
SAGLAN FA 50 Carbolane	fa50-pk-a1	Board	0,030	30-260	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN FA 50 Carbolane A	fa50-pak-a1	Board	0,030	30-260	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SB 55	sb55-pk-a1	Board	0,031	25 - 160	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SB 55 A	sb55-pak-a1	Board	0,031	25 - 160	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 55	sa55-pk-a1	Board	0,031	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 55 A	sa55-pak-a1	Board	0,031	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN ST	st-pk-a1	Board	0,031	10 - 60	A1	T6-DS(70,-)1-WS1-AF,40
SAGLAN ST A	st-pak-a1	Board	0,031	10 - 60	A1	T6-DS(70,-)1-WS1-AF,40
SAGLAN SB 55 K	sb55k-pgk-a1	Board	0,031	20 - 160	A1	T4-DS(70,-)1-AF,5
SAGLAN FA 40	fa40-pk-a1	Board	0,032	30 - 260	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN FA 40 A	fa40-pak	Board	0,032	30 - 260	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN FA Light / SR 30	falight-pk-a1	Board	0,032	30 - 300	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN FA Light A / SR 30 A	falight-pak-a1	Board	0,032	30 - 300	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SK 40 / SKN 40	sk40-pk-a1	Board	0,032	60 - 200	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SK 40 A / SKN 40 A	sk40-pak-a1	Board	0,032	60 - 200	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SK 32	sk32-pk-a1	Board	0,032	60 - 200	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SK 32 A	sk32-pak-a1	Board	0,032	60 - 200	A1	T3-DS(70,-)1-WL(P)3-AF,5

Table 1 Description of the products (continued)

Product	short name	Form of supply	Declared value of thermal conductivity λ_D W/(m·K)	Thickness mm	Reaction to fire class	Designation code EN 13162:2012+A1:2015
SAGLAN SKN 32	skn-pk-a1	Board	0,032	120 - 180	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN SKN 32 A	skn-pak-a1	Board	0,032	120 - 180	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN 600	600-pk-a1	Board	0,032	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN 600 A	600-pal-a1	Board	0,032	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN Extrapan Plus	extrapanplus-pk-a1	Board	0,032	30 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN Extrapan Plus A	extrapanplus-pak-a1	Board	0,032	30 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SB 40	sb44-pk-a1	Board	0,032	30 - 260	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SB 40 A	sb44-pak-a1	Board	0,032	30 - 260	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 40	sa40-pk-a1	Board	0,032	20 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 40 A	sa40-pak-a1	Board	0,032	20 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 50	sa50-pk-a1	Board	0,032	20 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 50 A	sa50-pak-a1	Board	0,032	20 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 100	sa100-pk-a1	Board	0,032	10 - 60	A1	T5-DS(70,-)1-WS1-AF,5
SAGLAN SA 100 A	sa100-pak-a1	Board	0,032	10 - 60	A1	T5-DS(70,-)1-WS1-AF,5
SAGLAN ST 100	st100-pk-a1	Board	0,032	10 - 70	A1	T6-DS(70,-)1-WS1-AF,40-CP3
SAGLAN ST 100 A	st100-pak-a1	Board	0,032	10 - 70	A1	T6-DS(70,-)1-WS1-AF,40-CP3
SAGLAN SA 80	sa80-pk-a1	Board	0,032	20 - 90	A1	T5-DS(70,-)1-WS1-AF,5
SAGLAN SA 80 A	sa80-pak-a1	Board	0,032	20 - 90	A1	T5-DS(70,-)1-WS1-AF,5
Saglan SI 30	si30-rk-a1	Roll	0,032	15 - 60	A1	T3-DS(70,-)1-AF,5
Saglan SI 30 A	si30-rak-a1	Roll	0,032	15 - 60	A1	T3-DS(70,-)1-AF,5
Saglan SBR plus	sbrplus-rk-a1	Roll	0,032	60 - 260	A1	T3-DS(70,-)1-WS1-AF,5
Saglan SBR plus A	sbrplus-rak-a2	Roll	0,032	60 - 260	A1	T3-DS(70,-)1-WS1-AF,5
Saglan SBR plus Sparren	sbrplus-rk-a1	Roll	0,032	60 - 260	A1	T3-DS(70,-)1-WS1-AF,5
Saglan SBR plus A Sparren	sbrplus-rak-a2	Roll	0,032	60 - 260	A1	T3-DS(70,-)1-WS1-AF,5

Table 1 Description of the products (continued)

Product	short name	Form of supply	Declared value of thermal conductivity λ_D W/(m·K)	Thickness mm	Reaction to fire class	Designation code EN 13162:2012+A1:2015
SAGLAN ST Floor	stfloor-pk-a1	Board	0,033	10 - 45	A1	T6-DS(70,-)1-WS1-AF,5-CP3
SAGLAN ST Floor A	stfloor-pak-a1	Board	0,033	10 - 45	A1	T6-DS(70,-)1-WS1-AF,5-CP3
SAGLAN TW 33	tw33-pk-a1	Board	0,033	50 - 250	A1	T3-DS(70,-)1-AF,5
SAGLAN TW 33 A	tw33-pak-a1	Board	0,033	50 - 250	A1	T3-DS(70,-)1-AF,5
Saglan TWR 33	twr33-rk-a1	Roll	0,033	50 - 250	A1	T3-DS(70,-)1-AF,5
Saglan TWR 33 A	twr33-rak-a1	Roll	0,033	50 - 250	A1	T3-DS(70,-)1-AF,5
SAGLAN FDPL	fdpl-pk-a1	Board	0,034	50 - 240	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN FDPL A	fdpl-pak-a1	Board	0,034	50 - 240	A1	T3-DS(70,-)1-WL(P)3-AF,5
SAGLAN Extrapan	extrapan-pk-a1	Board	0,034	15 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN Extrapan A	extrapan-pak-a1	Board	0,034	15 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN 800	800-pk-a1	Board	0,034	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN 800 A	800-pak-a1	Board	0,034	10 - 100	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SB 40 Light	sb40light-pk-a1	Board	0,034	30 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SB 40 Light A	sb40light-pak-a1	Board	0,034	30 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 30	sa30-pk-a1	Board	0,034	20 - 240	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN SA 30 A	sa30-pak-a1	Board	0,034	20 - 240	A1	T3-DS(70,-)1-WS1-AF,5
Saglan R-500	r500-rk-a1	Roll	0,034	25 - 240	A1	T3-DS(70,-)1-AF,5
Saglan R-500 A	r500-rak-a1	Roll	0,034	25 - 240	A1	T3-DS(70,-)1-AF,5
SAGLAN 400	400-pk-a1	Board	0,035	20 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN 400 A	400-pka-a1	Board	0,035	20 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN SB 22	sb22-pk-a1	Board	0,035	20 - 300	A1	T3-DS(70,-)1-AF,5
SAGLAN SB 22 A	sb22-pak-a1	Board	0,035	20 - 300	A1	T3-DS(70,-)1-AF,5
SR 22	sr22-pk-a1	Board	0,035	20 - 300	A1	T3-DS(70,-)1-AF,5
SR 22 A	sr22-pak-a1	Board	0,035	20 - 300	A1	T3-DS(70,-)1-AF,5
SAGLAN TC 22	tc22-pk-a1	Board	0,035	45 - 120	A1	T3-DS(70,-)1-AF,5
SAGLAN TC 22 A	tc22-pak-a1	Board	0,035	45 - 120	A1	T3-DS(70,-)1-AF,5

Table 1 Description of the products (continued)

Product	short name	Form of supply	Declared value of thermal conductivity λ_D W/(m·K)	Thickness mm	Reaction to fire class	Designation code EN 13162:2012+A1:2015
SAGLAN SA 25	sa25-pk-a1	Board	0,035	20 - 100	A1	T3-DS(70,-)1-AF,5
SAGLAN SA 25 A	sa25-pak-a1	Board	0,035	20 - 100	A1	T3-DS(70,-)1-AF,5
SAGLAN DF 50	df50-pk-a1	Board	0,035	60 - 220	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN DF 50 A	df50-pak-a1	Board	0,035	60 - 220	A1	T3-DS(70,-)1-WS1-AF,5
SAGLAN DF 70	df70-pk-a1	Board	0,035	40 - 220	A1	T5-DS(70,-)1-WS1-CS(10)15-AF,17
SAGLAN DF 70 A	df70-pak-a1	Board	0,035	40 - 220	A1	T5-DS(70,-)1-WS1-CS(10)15-AF,17
SAGLAN DF 80	df80-pk-a1	Board	0,035	40 - 220	A1	T5-DS(70,-)1-WS1-CS(10)15-AF,17
SAGLAN DF 80 A	df80-pak-a1	Board	0,035	40 - 220	A1	T5-DS(70,-)1-WS1-CS(10)15-AF,17
Saglan SI 30 K	si30k-rk-a1	Roll	0,035	30 - 180	A1	T3-DS(70,-)1-AF,5
Saglan SI 30 K A	si30k-rak-a1	Roll	0,035	30 - 180	A1	T3-DS(70,-)1-AF,5
Saglan SI 25	si25-rk-a1	Roll	0,035	20 - 60	A1	T3-DS(70,-)1-AF,5
Saglan SI 25 A	si25-rak-a1	Roll	0,035	20 - 60	A1	T3-DS(70,-)1-AF,5
Saglan SBR	sbr-rk-a1	Roll	0,035	50 - 260	A1	T3-DS(70,-)1-AF,5
Saglan SBR A	sbr-rak-a1	Roll	0,035	50 - 260	A1	T3-DS(70,-)1-AF,5
Saglan SBR Sparren	sbr-rk-a1	Roll	0,035	50 - 260	A1	T3-DS(70,-)1-AF,5
Saglan SBR Sparren A	sbr-rak-a1	Roll	0,035	50 - 260	A1	T3-DS(70,-)1-AF,5
Saglan R-400	r400-rk-a1	Roll	0,035	20 - 300	A1	T2-DS(70,-)1-AF,5
Saglan R-400 A	r400-rak-a1	Roll	0,035	20 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN Superpan	superpan-pk-a1	Board	0,036	30 - 240	A1	T2-DS(70,-)1-AF,5
SAGLAN Superpan A	superpan-pak-a1	Board	0,036	30 - 240	A1	T2-DS(70,-)1-AF,5
SAGLAN 300	300-pk-a1	Board	0,038	25 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN 300 A	300-pak-a1	Board	0,038	25 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN DPL	dpl-pk-a1	Board	0,038	30 - 300	A1	T2-DS(70,-)1-AF,5
SAGLAN DPL A	dpl-pak-a1	Board	0,038	30 - 300	A1	T2-DS(70,-)1-AF,5
Saglan SKR	skr-rk-a1	Roll	0,038	100 - 240	A1	T2-DS(70,-)1-AF,5
Saglan SKR A	skr-rak-a1	Roll	0,038	100 - 240	A1	T2-DS(70,-)1-AF,5

Table 1 Description of the products (continued)

Product	short name	Form of supply	Declared value of thermal conductivity λ_D W/(m·K)	Thickness mm	Reaction to fire class	Designation code EN 13162:2012+A1:2015
Saglan SI 20 K	si20k-rk-a1	Roll	0,038	50 - 180	A1	T3-DS(70,-)1-AF,5
Saglan SI 20 K A	si20k-rak-a1	Roll	0,038	50 - 180	A1	T3-DS(70,-)1-AF,5
Saglan R-300	r300-rk-a1	Roll	0,038	25 - 300	A1	T2-DS(70,-)1-AF,5
Saglan R-300 A	r300-rak-a1	Roll	0,038	25 - 300	A1	T2-DS(70,-)1-AF,5
Saglan TWKR	twkr-rk-a1	Roll	0,040	40 - 100	A1	T2-DS(70,-)1-AF,5
Saglan TWKR A	twkr-rak-a1	Roll	0,040	40 - 100	A1	T2-DS(70,-)1-AF,5
Glass 039	glass039-rk-a1	Roll	0,040	50 - 200	A1	T2-DS(70,-)1-AF,5
Glass 039 A	glass039-rak-a1	Roll	0,040	50 - 200	A1	T2-DS(70,-)1-AF,5
SAGLAN 200	200-pk-a1	Board	0,040	30 - 240	A1	T2-DS(70,-)1-AF,5
SAGLAN 200 A	200-pak-a1	Board	0,040	30 - 240	A1	T2-DS(70,-)1-AF,5
Saglan WDR	wdr-rk-a1	Roll	0,040	40 - 300	A1	T3-DS(70,-)1-AF,5
Saglan WDR A	wdr-rak-a1	Roll	0,040	40 - 300	A1	T3-DS(70,-)1-AF,5
Saglan SBR Light	sbright-rk-a1	Roll	0,040	80 - 280	A1	T2-DS(70,-)1-AF,5
Saglan SBR Light A	sbright-rak-a1	Roll	0,040	80 - 280	A1	T2-DS(70,-)1-AF,5
Saglan R-200	r200-rk-a1	Roll	0,040	30 - 240	A1	T2-DS(70,-)1-AF,5
Saglan R-200 A	r200-rak-a1	Roll	0,040	30 - 240	A1	T2-DS(70,-)1-AF,5

* The material characteristics given for the unfaced/uncoated products also apply to the variations of faced/coated products that meet fire class A1.
The products can be faced on one or both sides with the following facings/coatings:

A: pure Aluminum, fibre-scrim	Vgl: glass fleece yellow, longitudinally reinforced	Vn: glass fleece natural
G: glass fabric black	Vs: glass fleece black	
Vg: glass fleece yellow	Vsl: glass fleece black, longitudinally reinforced	

For explanations regarding reaction to fire characteristics see page 6

Explanations regarding the reaction to fire of mineral wool products without facing/coating:

- any thickness
- any density
- an organic content of $\leq 5,5\%$ w/w, equivalent to $1,1 \text{ kg/m}^3$ organic content for a mineral wool board with a density of 20 kg/m^3 .

Details see classification report 902 7272 017-80 MPA Stuttgart NB-No. 0672

Explanations regarding the reaction to fire of mineral wool products with a facing/coating on one or both sides:

Aluminium-composite-layer, one-sided:

- any thickness
- a density-range $\leq 100 \text{ kg/m}^3$ of the faced mineral wool
- an organic content of $\leq 5,5\%$ w/w, equivalent to $1,1 \text{ kg/m}^3$ organic content for a mineral wool board with a density of 20 kg/m^3
- one-sided aluminium-composite layer-film facing with total mass per unit - area of approx. 84 g/m^2

Details see classification report 902 7272 017-83 MPA Stuttgart NB-No. 0672

Mineral wool products with glass fabric on one or both sides:

- any thickness
- a density-range $\leq 100 \text{ kg/m}^3$ of the faced mineral wool
- an organic content of $\leq 5,5\%$ w/w, equivalent to $1,1 \text{ kg/m}^3$ organic content for a mineral wool board with a density of 20 kg/m^3
- an one- or two-sided glass-fabric facing with a mass per unit area of 128 g/m^2

Details see classification report 902 7272 017-82 MPA Stuttgart NB-No. 0672

Mineral wool products with glass fleece on one or both sides:

- any thickness
- a density-range $\leq 100 \text{ kg/m}^3$ of the faced mineral wool
- an organic content of $\leq 5,5\%$ w/w, equivalent to $1,1 \text{ kg/m}^3$ organic content for a mineral wool board with a density of 20 kg/m^3
- an one- or two-sided glass-fleece facing with a mass per unit area of $35 \text{ g/m}^2 - 100 \text{ g/m}^2$

Details see classification report 902 7272 017-81 MPA Stuttgart NB-No. 0672

Mineral wool products, faced with various facings, also in combination:

- a density-range $\leq 80 \text{ kg/m}^3$ of the mineral-wool
- an organic content of $\leq 4,0\%$ w/w, equivalent to $3,2 \text{ kg/m}^3$ organic content for a mineral wool board with a density of 79 kg/m^3 .
- with various one- or two-sided facings and combinations thereof

Details see classification report 902 7272 015-82 MPA Stuttgart NB-No. 0672

Gräfelfing, 23 Februar 2018



Head of Certification Body

Dipl.-Ing. (FH) Wolfgang Albrecht