

# AOFU SCR SUBSTRATES

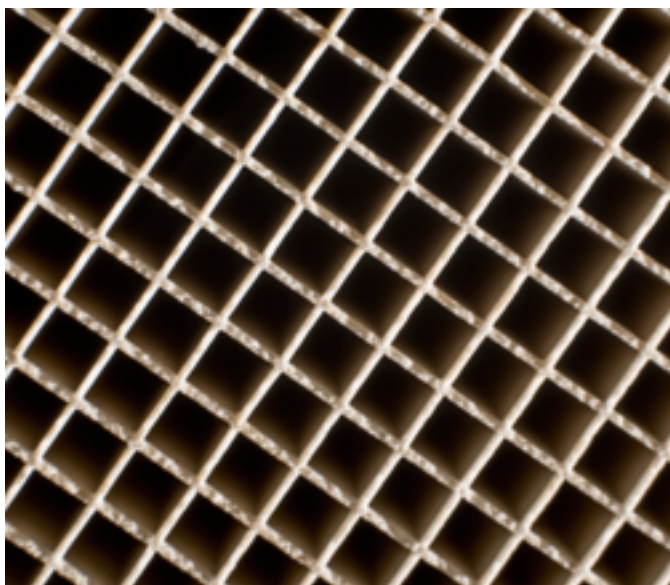


Our **AOFU SCR** ceramic substrates for emission control have proven themselves a million times.

The properties of the technical ceramic material have been optimized to the challenges of current and future standards.

Linear expansion, strength and weight, porosity and wetting are perfectly matched to the extreme levels of requirements like thermal shock, head balance, light weight and pressure drop.

However, we can also respond to your individual requests and adjust the parameters particular for the catalytic coating properties. The amount on surface combined with thin wall technology for low pressure drop are ready for the advanced upcoming regulations. Even under harshest conditions in the commercial vehicle sector, our Filters won't burn or be damaged.



## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +49 2777 812 901  
Fax: +49 2777 812 902  
Mobile: +49 1607 474 814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)



# AOFU SCR SUBSTRATES 300-5

NO	TYPE	CELLS cpsi	DIAMETER inch	LENGHT inch	DIAMETER mm	LENGHT mm	VOLUME L/pc
1	D 5.66x3-300	300	5,66	3,0	143,8	76,2	1,236
2	D 5.66x4-300	300	5,66	4,0	143,8	101,6	1,648
3	D 5.66x5-300	300	5,66	5,0	143,8	127,0	2,061
4	D 5.66x6-300	300	5,66	6,0	143,8	152,4	2,473
5	D 6.77x3-300	300	6,77	3,0	172,0	76,2	1,769
6	D 6.77x4-300	300	6,77	4,0	172,0	101,6	2,358
7	D 6.77x5-300	300	6,77	5,0	172,0	127,0	2,948
8	D 6.77x6-300	300	6,77	6,0	172,0	152,4	3,538
9	D 7.5x3-300	300	7,50	3,0	190,5	76,2	2,171
10	D 7.5x4-300	300	7,50	4,0	190,5	101,6	2,894
11	D 7.5x6-300	300	7,50	6,0	190,5	152,4	4,342
12	D 9x6-300	300	9,00	6,0	228,6	152,4	6,252
13	D 9.5x4-300	300	9,50	4,0	241,3	101,6	4,644
14	D 9.5x4.5-300	300	9,50	4,5	241,3	114,3	5,224
15	D 9.5x5-300	300	9,50	5,0	241,3	127,0	5,805
16	D 9.5x6-300	300	9,50	6,0	241,3	152,4	6,966
17	D 9x7.5-300	300	9,00	7,5	228,6	190,5	7,815
18	D 10.5x4-300	300	10,50	4,0	266,7	101,6	5,673
19	D 10.5x4.5-300	300	10,50	4,5	266,7	114,3	6,382
20	D 10.5x5-300	300	10,50	5,0	266,7	127,0	7,091
21	D 10.5x6-300	300	10,50	6,0	266,7	152,4	8,509
22	D 10.5x7-300	300	10,50	7,0	266,7	177,8	9,928
23	D 11.25x3-300	300	11,25	3,0	285,8	76,2	4,884
24	D 11.25x4-300	300	11,25	4,0	285,8	101,6	6,512
25	D 11.25x4.5-300	300	11,25	4,5	285,8	114,3	7,326
26	D 11.25x5-300	300	11,25	5,0	285,8	127,0	8,140
27	D 11.25x6-300	300	11,25	6,0	285,8	152,4	9,768
28	D 13x4-300	300	13,00	4,0	330,2	101,6	8,696
29	D 13x6-300	300	13,00	6,0	330,2	152,4	13,044
30	D 13x7-300	300	13,00	7,0	330,2	177,8	15,218
31	D 13x8-300	300	13,00	8,0	330,2	203,2	17,392

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: hofmann@aofu.de  
Phone: +492777812901  
Fax: +492777812902  
Mobile: +491607474814  
www.aofu.de

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: mengping@aofuchina.com  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
www.sdaofu.com



# AOFU SCR SUBSTRATES 400-5

NO	TYPE	CELLS cpsi	DIAMETER inch	LENGHT inch	DIAMETER mm	LENGHT mm	VOLUME L/pc
1	D 5.66x3-400	400	5,66	3,0	143,8	76,2	1,236
2	D 5.66x4-400	400	5,66	4,0	143,8	101,6	1,648
3	D 5.66x5-400	400	5,66	5,0	143,8	127,0	2,061
4	D 5.66x6-400	400	5,66	6,0	143,8	152,4	2,473
5	D 6.77x3-400	400	6,77	3,0	172,0	76,2	1,769
6	D 6.77x4-400	400	6,77	4,0	172,0	101,6	2,358
7	D 6.77x5-400	400	6,77	5,0	172,0	127,0	2,948
8	D 6.77x6-400	400	6,77	6,0	172,0	152,4	3,538
9	D 7.5x3-400	400	7,50	3,0	190,5	76,2	2,171
10	D 7.5x4-400	400	7,50	4,0	190,5	101,6	2,894
11	D 7.5x6-400	400	7,50	6,0	190,5	152,4	4,342
12	D 9x6-400	400	9,00	6,0	228,6	152,4	6,252
13	D 9.5x4-400	400	9,50	4,0	241,3	101,6	4,644
14	D 9.5x4.5-400	400	9,50	4,5	241,3	114,3	5,224
15	D 9.5x5-400	400	9,50	5,0	241,3	127,0	5,805
16	D 9.5x6-400	400	9,50	6,0	241,3	152,4	6,966
17	D 9x7.5-400	400	9,00	7,5	228,6	190,5	7,815
18	D 10.5x4-400	400	10,50	4,0	266,7	101,6	5,673
19	D 10.5x4.5-400	400	10,50	4,5	266,7	114,3	6,382
20	D 10.5x5-400	400	10,50	5,0	266,7	127,0	7,091
21	D 10.5x6-400	400	10,50	6,0	266,7	152,4	8,509
22	D 10.5x7-400	400	10,50	7,0	266,7	177,8	9,928
23	D 11.25x3-400	400	11,25	3,0	285,8	76,2	4,884
24	D 11.25x4-400	400	11,25	4,0	285,8	101,6	6,512
25	D 11.25x4.5-400	400	11,25	4,5	285,8	114,3	7,326
26	D 11.25x5-400	400	11,25	5,0	285,8	127,0	8,140
27	D 11.25x6-400	400	11,25	6,0	285,8	152,4	9,768
28	D 13x4-300	400	13,00	4,0	330,2	101,6	8,696
29	D 13x6-300	400	13,00	6,0	330,2	152,4	13,044
30	D 13x7-300	400	13,00	7,0	330,2	177,8	15,218
31	D 13x8-300	400	13,00	8,0	330,2	203,2	17,392

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +492777812901  
Fax: +492777812902  
Mobile: +491607474814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)



# AOFU SCR SUBSTRATES 400-4

NO	TYPE	CELLS cpsi	DIAMETER inch	LENGHT inch	DIAMETER mm	LENGHT mm	VOLUME L/pc
1	D 5.66x3-400	400	5,66	3,0	143,8	76,2	1,236
2	D 5.66x4-400	400	5,66	4,0	143,8	101,6	1,648
3	D 5.66x5-400	400	5,66	5,0	143,8	127,0	2,061
4	D 5.66x6-400	400	5,66	6,0	143,8	152,4	2,473
5	D 6.77x3-400	400	6,77	3,0	172,0	76,2	1,769
6	D 6.77x4-400	400	6,77	4,0	172,0	101,6	2,358
7	D 6.77x5-400	400	6,77	5,0	172,0	127,0	2,948
8	D 6.77x6-400	400	6,77	6,0	172,0	152,4	3,538
9	D 7.5x3-400	400	7,50	3,0	190,5	76,2	2,171
10	D 7.5x4-400	400	7,50	4,0	190,5	101,6	2,894
11	D 7.5x6-400	400	7,50	6,0	190,5	152,4	4,342
12	D 9x6-400	400	9,00	6,0	228,6	152,4	6,252
13	D 9.5x4-400	400	9,50	4,0	241,3	101,6	4,644
14	D 9.5x4.5-400	400	9,50	4,5	241,3	114,3	5,224
15	D 9.5x5-400	400	9,50	5,0	241,3	127,0	5,805
16	D 9.5x6-400	400	9,50	6,0	241,3	152,4	6,966
17	D 9x7.5-400	400	9,00	7,5	228,6	190,5	7,815
18	D 10.5x4-400	400	10,50	4,0	266,7	101,6	5,673
19	D 10.5x4.5-400	400	10,50	4,5	266,7	114,3	6,382
20	D 10.5x5-400	400	10,50	5,0	266,7	127,0	7,091
21	D 10.5x6-400	400	10,50	6,0	266,7	152,4	8,509
22	D 10.5x7-400	400	10,50	7,0	266,7	177,8	9,928
23	D 11.25x3-400	400	11,25	3,0	285,8	76,2	4,884
24	D 11.25x4-400	400	11,25	4,0	285,8	101,6	6,512
25	D 11.25x4.5-400	400	11,25	4,5	285,8	114,3	7,326
26	D 11.25x5-400	400	11,25	5,0	285,8	127,0	8,140
27	D 11.25x6-400	400	11,25	6,0	285,8	152,4	9,768
28	D 13x4-300	400	13,00	4,0	330,2	101,6	8,696
29	D 13x6-300	400	13,00	6,0	330,2	152,4	13,044
30	D 13x7-300	400	13,00	7,0	330,2	177,8	15,218
31	D 13x8-300	400	13,00	8,0	330,2	203,2	17,392

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +49 2777 812 901  
Fax: +49 2777 812 902  
Mobile: +49 1607 474 814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)



# AOFU SCR SUBSTRATES PROPERTIES

TEST ITEMS		UNIT	SCR 300-5	SCR 400-5	SCR 400-4
PHYSICAL PROPERTIES					
Diameter	D<290	mm	±1,0	±1,0	±1,0
	290≤D<350	mm	±1,2	±1,2	±1,2
Length	L<150	mm	±1,5	±1,5	±1,5
	L≥150	mm	±2,0	±2,0	±2,0
Flatness	D≤290	mm	≤1,0	≤1,0	≤1,0
	D>290	mm	≤1,2	≤1,2	≤1,2
Parallelism	D≤270	mm	≤1,0	≤1,0	≤1,0
	270<D≤290	mm	≤1,2	≤1,2	≤1,2
	290<D≤350	mm	≤1,5	≤1,5	≤1,5
Perpendicularity	L≤100	mm	≤1,0	≤1,0	≤1,0
	L>100	mm	≤Lx1,0%	≤Lx1,0%	≤Lx1,0%
Wall Thickness		mm	0,132±0,033	0,132±0,033	0,102±0,026
Cell density		cpsi	300±10%	400±10%	400±10%
Coeff. of lin. therm. Exp. (40-800°C)		x10 <sup>-6</sup> / Kx10 <sup>-6</sup> /K	≤1,25≤1,25	≤1,25	≤1,25
Water Absorption		%	20-28 range≤420-28 range≤4	20-28 range≤420-28 range≤4	20-28 range≤4
Softening Temperature		°C	1300	1300	1300
Bulk Density		g/cm <sup>3</sup>	<0,65	<0,65	<0,65
Flexural Strength	A-xial	MPa	≥5	≥5	≥5
Isostatic Strength		MPa	≥1,03	≥1,03	≥1,03
Thermal Shock Resistance		550°C	three times	three times	three times
Crystalline Phase	Cordierite	%	≥90	≥90	≥90
	Others		≤10	≤10	≤10
CHEMICAL PROPERTIES					
SiO <sub>2</sub>		%	50±2,5	50±2,5	50±2,5
Al <sub>2</sub> O <sub>3</sub>		%	35.2±2,5	35.2±2,5	35.2±2,5
MgO		%	13,5±2,0	13,5±2,0	13,5±2,0
Fe <sub>2</sub> O <sub>3</sub>		%	≤1,0	≤1,0	≤1,0
TiO <sub>2</sub>		%	≤1,0	≤1,0	≤1,0
CaO		%	≤0.8	≤0.8	≤0.8
Na <sub>2</sub> O+ K <sub>2</sub> O		%	≤1,0	≤1,0	≤1,0

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: hofmann@aofu.de  
Phone: +492777812901  
Fax: +492777812902  
Mobile: +491607474814  
www.aofu.de

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: mengping@aofuchina.com  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
www.sdaofu.com



# AOFU DPF SUBSTRATES



Our **AOFU DPF** for emission control have proven themselves a million times.

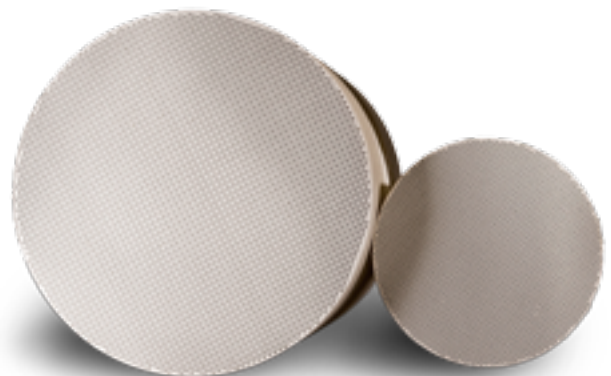
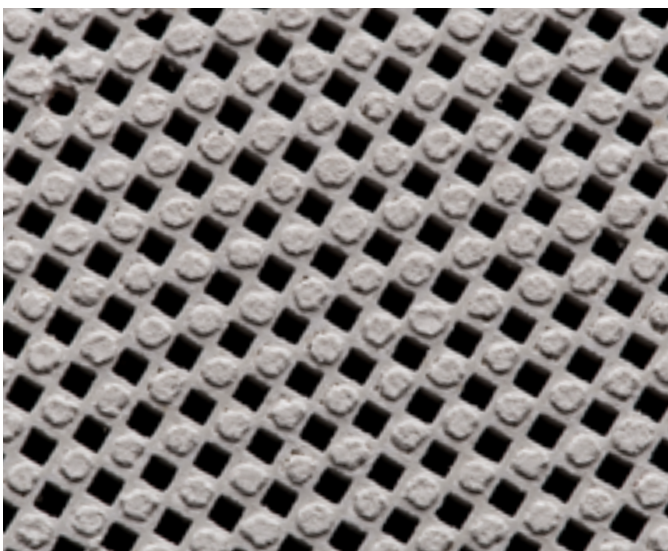
The properties of the technical ceramic material have been optimized to the challenges of current and future standards.

Linear expansion, strength and weight, porosity and wetting are perfectly matched to the extreme levels of requirements like thermal shock, head balance, light weight and pressure drop.

However, we can also respond to your individual requests and adjust the parameters.

The kind of porosity is especially important

for the DPF diesel particulate filter. We can handle by controlling the porosity. In any case, for the Light Duty system as well as for heavy-duty applications with extreme load change requirements, our DPF substrates is what you need. As single solution or DPF combined with a SCR coating, with our substrates you are always well served. The DPF regeneration properties are optimal. Even under harshest conditions in the commercial vehicle sector, our Filters won't burn or be damaged.



## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +49 2777 812 901  
Fax: +49 2777 812 902  
Mobile: +49 1607 474 814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)



# AOFU DPF SUBSTRATES 200-12

NO	TYPE	CELLS cpsi	DIAMETER inch	LENGHT inch	DIAMETER mm	LENGHT mm	VOLUME L/pc
1	D 5.66x6-200	200	5,66	6,0	143,8	152,4	2,473
2	D 5.66x7.2-200	200	5,66	7,2	143,8	182,9	2,967
3	D 6.7x8-200	200	6,70	8,0	170,2	203,2	4,620
4	D 7.5x8-200	200	7,50	8,0	190,5	203,2	5,789
5	D 9x8-200	200	9,00	8,0	228,6	203,2	8,336
6	D 9x9-200	200	9,00	9,0	228,6	228,6	9,378
7	D 9x10-200	200	9,00	10,0	228,6	254,0	10,420
8	D 9x11-200	200	9,00	11,0	228,6	279,4	11,462
9	D 9x12-200	200	9,00	12,0	228,6	304,8	12,504
10	D 9.1x9-200	200	9,10	9,0	231,1	228,6	9,587
11	D 10.5x9-200	200	10,50	9,0	266,7	228,6	12,764
12	D 10.5x10-200	200	10,50	10,0	266,7	254,0	14,182
13	D 10.5x12-200	200	10,50	12,0	266,7	304,8	17,019
14	D 11.25x12-200	200	11,25	12,0	285,8	304,8	19,537
15	D 12x10-200	200	12,00	10,0	304,8	254,0	18,524
16	D 12x11-200	200	12,00	11,0	304,8	279,4	20,376
17	D 12x12-200	200	12,00	12,0	304,8	304,8	22,229
18	D 13x10-200	200	13,00	10,0	330,2	254,0	21,740
19	D 13x12-200	200	13,00	12,0	330,2	304,8	26,088

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +49 2777 812 901  
Fax: +49 2777 812 902  
Mobile: +49 1607 474 814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)



# AOFU DPF SUBSTRATES 300-12

NO	TYPE	CELLS cpsi	DIAMETER inch	LENGHT inch	DIAMETER mm	LENGHT mm	VOLUME L/pc
1	D 5.66x6-300	300	5,66	6,0	143,8	152,4	2,473
2	D 5.66x7.2-300	300	5,66	7,2	143,8	182,9	2,967
3	D 6.7x8-300	300	6,70	8,0	170,2	203,2	4,620
4	D 7.5x8-300	300	7,50	8,0	190,5	203,2	5,789
5	D 9x8-300	300	9,00	8,0	228,6	203,2	8,336
6	D 9x9-300	300	9,00	9,0	228,6	228,6	9,378
7	D 9x10-300	300	9,00	10,0	228,6	254,0	10,420
8	D 9x11-300	300	9,00	11,0	228,6	279,4	11,462
9	D 9x12-300	300	9,00	12,0	228,6	304,8	12,504
10	D 9.1x9-300	300	9,10	9,0	231,1	228,6	9,587
11	D 10.5x9-300	300	10,50	9,0	266,7	228,6	12,764
12	D 10.5x10-300	300	10,50	10,0	266,7	254,0	14,182
13	D 10.5x12-300	300	10,50	12,0	266,7	304,8	17,019
14	D 11.25x12-300	300	11,25	12,0	285,8	304,8	19,537
15	D 12x10-300	300	12,00	10,0	304,8	254,0	18,524
16	D 12x11-300	300	12,00	11,0	304,8	279,4	20,376
17	D 12x12-300	300	12,00	12,0	304,8	304,8	22,229
18	D 13x10-300	300	13,00	10,0	330,2	254,0	21,740
19	D 13x12-300	300	13,00	12,0	330,2	304,8	26,088

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: [hofmann@aofu.de](mailto:hofmann@aofu.de)  
Phone: +49 2777 812 901  
Fax: +49 2777 812 902  
Mobile: +49 1607 474 814  
[www.aofu.de](http://www.aofu.de)

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: [mengping@aofuchina.com](mailto:mengping@aofuchina.com)  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
[www.sdaofu.com](http://www.sdaofu.com)





# AOFU DPF SUBSTRATES PROPERTIES

TEST ITEMS		UNIT	DPF 200-12	DPF 300-12
<b>PHYSICAL PROPERTIES</b>				
Diameter	D<290	mm	±1,0	±1,0
	290≤D<350	mm	±1,2	±1,2
Length	L<150	mm	±1,5	±1,5
	L≥150	mm	±2,0	±2,0
Flatness	D≤290	mm	≤1,0	≤1,0
	D>290	mm	≤1,2	≤1,2
Parallelism	D≤270	mm	≤1,0	≤1,0
	270<D≤290	mm	≤1,2	≤1,2
	290<D≤350	mm	≤1,5	≤1,5
Perpendicularity	L≤100	mm	≤1,0	≤1,0
	L>100	mm	≤Lx1,0%	≤Lx1,0%
Wall Thickness		mm	0,305±0,033	0,305±0,033
Cell density		cpsi	200±10%	300±10%
Coeffic. of lin. therm. Exp. (40-800°C)		x10 <sup>-6</sup> /Kx10 <sup>-6</sup> /Kx10 <sup>-6</sup> /K	≤1,45	≤1,45≤1,45≤1,45
Water Absorption		%	≥30≥30≥30	≥30≥30≥30
Apparent Porosity		%	60±5	60±5
Total Pore Volume		cm <sup>3</sup> /gcm <sup>3</sup> /g	0.5-0.73	0.5-0.73
Mean Pore Size		µm µm	13-18	13-18
Softening Temperature		°C	1300	1300
Flexural Strength	A-xial	MPa	≥5	≥5
Isostatic Strength		MPa	≥1,03	≥1,03
Thermal Shock Resistance		550°C	three times	three times
Crystalline Phase	Cordierite	%	≥90	≥90
	Others		≤10	≤10
<b>CHEMICAL PROPERTIES</b>				
SiO <sub>2</sub> SiO <sub>2</sub>		%	50±2,5	50±2,5
Al <sub>2</sub> O <sub>3</sub> Al <sub>2</sub> O <sub>3</sub>		%	35.2±2,5	35.2±2,5
MgO		%	13,5±2,0	13,5±2,0
Fe <sub>2</sub> O <sub>3</sub> Fe <sub>2</sub> O <sub>3</sub>		%	≤1,0	≤1,0
TiO <sub>2</sub> TiO <sub>2</sub>		%	≤1,0	≤1,0
CaO		%	≤0.8	≤0.8
Na <sub>2</sub> O+ K <sub>2</sub> O		%	≤1,0	≤1,0

## EUROPE SALES OFFICE

**HARTMUT HOFMANN**  
Dipl. Ing. (FH)  
Am Kettensberg 8  
D-35767 Breitscheid

E-Mail: hofmann@aofu.de  
Phone: +492777812901  
Fax: +492777812902  
Mobile: +491607474814  
www.aofu.de

## CHINA

**MS. MENG PING**  
Vice General Manager  
Fumin Road  
Dezhou City 251500  
Shandong Province

E-Mail: mengping@aofuchina.com  
Mobile: +86 139 102 893 70  
+86 133 013 081 33  
www.sdaofu.com

