

# Audiofoam® Quash

## PRODUCT SPECIFICATION SHEET CLOSED CELL POLYETHYLENE FOAM

Physical Properties	Test Method	Unit	Typical Physical Properties
Nominal Density	ASTM D3575-08 Suffix W ISO 845:2006	Kg/m <sup>3</sup>	25
Compressive Strength Vertical @ 25% Vertical @ 50%	ASTM D3575-08 Suffix D ISO 7214:2007	KPa	7 12
Compressive Strength 25% (4th compression) 50% (4th compression) 70% (4th compression) (100mm/min compression speed)	ISO 3386 1986 part 1 DIN 53577	KPa	3 7 25
Compression Set	ASTM D3575-08 Suffix B (50% Compression) ISO 1856:2000 (25% compression)	%	< 30 < 20
Cell Size	BS 4443/1 Met.4	Cells/25mm	< 10
Fire-test-response Characteristics (1) Transportation	TS EN 45545-2 NF F 16-101	Class Class	HL2 for flooring, HL1 for ceiling and wall. F1
Automotive	DIN 54837 FMVSS 302	- Class	S3, SR2, ST2 Pass
Building & Construction	DIN 4102 EN 13501-1	Class Class	B1 Class B-s2-d0
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Kg/m <sup>2</sup>	< 3
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Volume %	< 5
Thermal Conductivity @ 23°C @ -5°C	ASTM D3575-08 Suffix V ISO 8301	W/mK	0.104 0.082
Thermal stability (24hrs at 70°C)	ASTM D3575-08 Suffix S ISO 2796	%	< 3
Tensile Strength @ Peak	ASTM D3575 Suffix T ISO1798	KPa	130
Tensile Elongation	ASTM D3575 Suffix T ISO1798	%	60
VOC Emissions	AFNOR NF EN ISO 16000-9	Class	A+

(1) These numerical laboratory fire-test-response characteristics are not intended to reflect hazards presented by this material under actual fire conditions.

**Test results**

Sample mounting method	A
Volume of reverberation room "V"	218,8 m <sup>3</sup>
Area covered by the test sample "S"	10,31 m <sup>2</sup>
Speed of sound "c <sub>1</sub> " at temperature "t <sub>1</sub> "	347,1 m/s
Speed of sound "c <sub>2</sub> " at temperature "t <sub>2</sub> "	347,9 m/s

Frequency [Hz]	T <sub>1</sub> [s]	T <sub>2</sub> [s]	4 · V · (m <sub>2</sub> - m <sub>1</sub> ) [m <sup>2</sup> ]	A [m <sup>2</sup> ]	α <sub>s</sub>	v <sub>eff</sub>	k	U
100	5,88	4,97	0,0	1,1	<b>0,11</b>	16	2,00	0,04
125	5,69	5,21	0,0	0,6	<b>0,06</b>	18	2,00	0,04
160	6,60	4,51	0,0	2,4	<b>0,23</b>	14	2,00	0,04
200	7,58	4,55	0,0	3,1	<b>0,30</b>	14	2,00	0,04
250	8,24	3,66	0,0	5,3	<b>0,51</b>	14	2,00	0,04
315	7,52	2,37	0,0	10,0	<b>0,97</b>	13	2,00	0,04
400	7,30	2,22	0,0	10,9	<b>1,06</b>	14	2,00	0,04
500	6,66	2,26	0,0	10,2	<b>0,99</b>	21	2,00	0,03
630	5,34	2,10	0,0	10,0	<b>0,97</b>	14	2,00	0,05
800	4,96	2,01	0,0	10,3	<b>1,00</b>	24	2,00	0,02
1000	4,76	1,89	0,0	11,1	<b>1,08</b>	14	2,00	0,04
1250	4,33	1,91	0,0	10,2	<b>0,99</b>	12	2,00	0,11
1600	3,88	1,85	0,0	9,8	<b>0,95</b>	15	2,00	0,04
2000	3,66	1,71	0,0	10,8	<b>1,05</b>	19	2,00	0,03
2500	3,45	1,68	0,0	10,6	<b>1,03</b>	12	2,00	0,05
3150	3,10	1,70	0,0	9,2	<b>0,89</b>	16	2,00	0,03
4000	2,84	1,66	0,0	8,7	<b>0,84</b>	16	2,00	0,03
5000	2,45	1,53	0,0	8,5	<b>0,82</b>	16	2,00	0,03