poraver® expanded glass

TECHNICAL DATA SHEET

Lightweight aggregate according to DIN EN 13055-1

Poraver® expanded glass	BASIC GRANULAR SIZES					SPECIAL GRANULAR SIZES	
Granular size in mm	**0.1-0.3**	**0.25-0.5**	**0.5-1**	**1-2**	**2-4**	**0.04-0.125**	**0.5-1.25**
Bulk density in kg/m³	400 ± 60	340 ± 30	270 ± 30	230 ± 30	190 ± 20	530 ± 70	260 ± 30
Particle density in kg/m³	950 [1] ± 150	700 [1] ± 80	500 [1] ± 80	400 [1] ± 60	320 [1] ± 40	1400 [2] ± 300	490 [1] ± 80
Crushing resistance in N/mm² according to DIN EN 13055-1 [3]	2.8	2.6	2.0	1.6	1.4	-	1.9
Oversize % by mass	≤ 10						
Undersize % by mass	≤ 15						
pH value	8 - 11						
Moisture content % by volume	< 0.2						
Moisture content % by mass	< 0.5						
Water absorption % by volume	33	15	9	7	4.5	-	10
Water absorption % by mass	35	21	18	19	14	-	20
Softening point	approx. 700°C						
Colour	creamy white						
Thermal conductivity W/(m·K)	-	-	-	-	0.07 [4]	-	-
CE according DIN EN 13055-1	•	•	•	•	•	-	•
Approval Z-3.42-1894	•	•	•	•	•	-	•
Approval Z-23.11-114	-	-	-	-	•	-	-

[1] Apparent (relative) density according to EN 1097-6
[2] Density of filler according to EN 1097-7
[3] Values according to DIN V 18004 on request
[4] Calculated values DIBt according to Approval Z-23.11-114 (Thermal insulating material, non combustible according to construction material class DIN 4102-A1)

The strength grades may vary within the tolerance range of bulk densities. The availability and delivery conditions for special grain sizes will be agreed on an individual basis.

CHEMICAL ANALYSIS

Constituent	Applied to the sample dried at 105°C	LOI free	Analysis method
Loss on ignition	0.3 %	-	DIN EN 1744-1
CaO	8.9 %	9.0 %	atomic emission spectrometric (AES)
SiO_2	71.7 %	71.9 %	
Al_2O_3	2.5 %	2.5 %	
TiO_2	0.1 %	0.1 %	
Fe_2O_3	0.4 %	0.4 %	
Mn_2O_3	0 %	0 %	
MgO	2.1 %	2.1 %	
K_2O	0.8 %	0.8 %	
Na_2O	13.2 %	13.2 %	
SO_3	0.1 %	0.1 %	coulometric
Cl	-	-	argentometric

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