

TECHNICAL DATA SHEET

According to ASTM C330, C331, C332

Poraver® expanded glass is available in five standard and two special grain sizes. With this wide variety of grain sizes from 0.04 mm to 4 mm, Poraver® expanded glass granulate offers a suitable lightweight aggregate solution for every field of application.

PROPERTIES	STANDARD	PORAVER® STANDARD GRAIN SIZES					PORAVER® SPECIAL GRAIN SIZES		
		0.1-0.3	0.25-0.5	0.5-1	1-2	2-4	NEW		
Grain size [mm]	ASTM C136	0.1-0.3	0.25-0.5	0.5-1	1-2	2-4	0.04-0.125	0.1-0.5	
Particle size [mesh #]		140-50	60-35	35-18	18-10	10-5	400-120	140-35	
Fineness modulus		0.66	1.92	2.72	3.81	4.7	on request	0.81	
Dry loose bulk density	ASTM C9/C29M	[kg/m ³]	400 ± 60	340 ± 30	270 ± 30	230 ± 30	190 ± 20	530 ± 70	380 ± 60
		[lb/ft ³]	25 ± 3.8	21.2 ± 3.2	16.9 ± 3	14.4 ± 2.1	11.9 ± 1.8	33.1 ± 4.4	23.7 ± 3.8
Apparent density	ASTM C128	[kg/m ³]	850 ± 120	680 ± 50	450 ± 50	410 ± 50	350 ± 40	on request	800 ± 60
		[lb/ft ³]	53.1 ± 8.4	42.5 ± 5.6	28.1 ± 4.4	25.6 ± 3.6	21.8 ± 3	on request	49.9 ± 3.8
Compressive strength	EN 13055-1	[MPa]	2.8	2.6	2	1.6	1.4	on request	3.0
		[PSI]	406	377	290	232	203	on request	435
Water absorption by mass ¹⁾ [Mass. %]	ASTM C128	35	28	20	20	23	on request	32	
Water absorption by volume ¹⁾ [Vol. %]	ASTM C128	22	15	9	7	7	on request	20	
Organic impurities	ASTM C40	no injurious compounds					no injurious compounds		
Staining index (index number)	ASTM C641	0					0		
Loss on ignition [%]	ASTM C114	~1					~1		
Clay lumps and friable particles [%]	ASTM C142	-	-	-	< 2	< 2	-	-	
Oversize	EN 13055-1	≤ 10% by mass					≤ 10% by mass		
Undersize		≤ 15% by mass					≤ 15% by mass		

¹⁾ % absorption determined after 5 minutes submerged in water

The following data are valid for all grain sizes:

pH value		9-12					9-12	
Moisture content on delivery		≤ 0.5 %					≤ 0.5 %	
Softening point		approx. 700°C / 1300°F					approx. 700°C / 1300°F	
Color		creamy white					creamy white	
Thermal conductivity	[W/m-K]	-	-	-	-	0.07 ²⁾	-	-
	[BTU-in/hr-ft ² -°F]	-	-	-	-	0.486 ²⁾	-	-

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.

²⁾ calculated values DIBt according to approval Z-23.11-114

