

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	
									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	[kg/m³]	ASTM C9/C29M	400 ± 60	340 ± 30	270 ± 30	230 ± 30	190 ± 20	530 ± 70	380 ± 60
	[lb/ft³]		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	[kg/m³]	ASTM C128	850 ± 120	680 ± 50	450 ± 50	410 ± 50	350 ± 40	on request	800 ± 60
	[lb/ft³]		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	[MPa]	EN 13055-1	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-ft²·°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

