

Alumina Bubble Type IB-100

General Information

ZIRCAR Ceramics' Alumina Bubbles Type IB-100 are hollow, thin-wall, high-purity alumina ceramic spheres. These low-density sintered ceramic bodies exhibit low thermal conductivity, exceptional resistance to chemical attack, high packing strength and excellent thermal shock resistance. IB-100 can be used as a bulk fill material or as a raw material in casting of low-density rigid shapes. IB-100 is available in two standard bubble size ranges.



Characteristics & Properties

Туре	IB-100A	IB-100B	
Composition, wt%			
Al_2O_3	99.	99.2	
SiO ₂	0.6	0.6	
Fe ₂ O ₃	0.0	0.02	
Na ₂ O	0.1	0.15	
CaO	0.0	0.01	
Other Oxides	0.0	0.02	
Nominal Bulk Density, g/cc (pcf)	0.59 (37)	0.64 (40)	
Thermal Conductivity, W/m°K (BTU/hr ft² °F/in)			
@ 100°C	4.2 (29	4.2 (29.14)	
@ 1000°C	0.9 (6	0.9 (6.24)	
Typical Bubble Sizes, wt%			
+6 mesh (3.35mm)	-	25	
+8 mesh (2.36mm)	51	40.8	
+9 mesh (2.00mm)	-	16.9	
+10 mesh (1.70mm)	20.6	13.3	
+20 mesh (0.85mm)	26	-	

The data presented herein is intended to help the user to determine the appropriateness of this material for their application. This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications.

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Suggested Applications

Low-density aggregate in cast refractory shapes.

Loose insulation fills in fiber optic glass production furnaces.

Bulk insulation in cavities with complex and occluded cavities.

Leveling materials on hearths.

Intermediate insulation in furnace applications operating to temperatures as high as 1800°C.

Availability of Standard Bubble

ITEM #	DESCRIPTION	
D6030	IB-100A, 50 lb	
D6045	IB-100B, 50 lb	

To Order

Standard IB-100: order online or specify quantity, item # and description. Standard items are available for immediate shipment from stock.

Custom bubble sizes as fine as 0.46mm (0.018") are available.



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