

ZTA ALUMINA COMPOSITE ZIRCONIA

ZAWIN® - 450



**VALUE
TO
MAXIMIZE
YOUR WIN**

Characteristics

Zirconia Toughened Alumina Beads, also known as ZTA beads, is a high performance ceramic material that has become increasingly popular in various industries due to its unique properties. ZTA beads is composed of alumina and zirconia, which are two of the hardest and most durable ceramic materials available.

One of the main benefits of ZAWIN® beads is its high wear resistance. It can withstand high temperatures and harsh environments, making it ideal for use in applications such as grinding media, wear-resistant linings, and cutting tools.

In addition, ZAWIN® beads has a high fracture toughness, which means it can resist cracking and breaking under stress. Another advantage of our ZTA beads is its excellent corrosion resistance. It can withstand exposure to acids, alkalis, and other corrosive substances without deteriorating.

Valwin Zirconia Toughened Alumina Beads are successfully being used in many modern types of mills, which include vertical mills, horizontal mills, agitated media mills and stirred media mills.

General Properties

Property	Value
Main Raw Material	Alumina + Zirconium
Alumina Content (%)	≥ 5
Zirconium Content (%)	≥ 60
Specific Weight (g/cm ³)	4.48 ± 0.03
Colour	White
Water Absorption (%)	Not Detected
Mohs Hardness	9
Roundness (%)	≥ 95
Wear loss Rate (g/kg.h)	≤ 1.5

Chemical Composition

Element	Quantity
Al ₂ O ₃ (%)	≥ 60
ZrO ₂ (%)	≥ 30
SiO ₂ (%)	≤ 10
Na ₂ O (%)	< 0.2
Others (%)	≥ 0.2

Available Sizes

Reference	Diameter (mm)	Reference	Diameter (mm)
ZAWIN450-0.5	0.5 – 1.0	ZAWIN450-4	4
ZAWIN450-1.5	1.5	ZAWIN450-5	5
ZAWIN450-2	2	ZAWIN450-6	6
ZAWIN450-2.5	2.5	ZAWIN450-8	8
ZAWIN450-3	3	ZAWIN450-10	10
ZAWIN450-3.5	3.5	ZAWIN450-13	13

Data and specifications contained in this technical data sheet may be subject to any change or modification by the manufacturer without notice. In case you need any clarification or you have any query, please contact our technical department.

Contact:

Sales Department

sales@valwin.es

Technical Department

technical@valwin.es

www.valwin.es