

ZA40 Alumina Zirconia Blast Media

Technical Data Sheet

11/2024

ZA40 Alumina Zirconia Blast Media

ZA40 Zirconia fused alumina is a high-performance sandblasting medium made of zirconium oxide and aluminum oxide by a special melting process. It has high hardness and toughness, as well as excellent impact resistance. Compared with ZA25, it is more suitable for industries that focus on precision, uniformity, and fine processing.

- Extremely high durability.
- Provide uniform surface texture and matte finish.
- Reduced media breakdown improves cleanliness and reduces contamination risk.
- Suitable for a wider range of materials, including sensitive ones.
- High toughness, but less aggressive than ZA25.
- Compatible with a wide range of blasting systems, including pneumatic and turbine equipment.

DESIGNATION AND AVAILABLE SIZES

F Sand	g/cm3	F Sand	g/cm3	F Sand	g/cm3	F Sand	g/cm3	F Sand	g/cm3	F Sand	g/cm3
F8	2.34-2.38	F10	2.28-2.32	F12	2.26-2.30	F14	2.24-2.28	F16	2.18-2.24	F20	2.15-2.21
F22	2.12-2.18	F24	2.09-2.15	F30	2.00-2.12	F36	1.99-2.10	F40	1.96-2.08	F46	1.94-2.05
F54	1.92-2.03	F60	1.93-2.00	F70	1.88-2.01	F80	1.88-1.98	F90	1.86-2.00	F100	1.85-1.97
F120	1.84-1.95	F150	1.83-1.95	F180	1.81-1.93	F220	1.82-1.92				

CHEMICAL ANALYSIS

Typical values	ZrO ₂	Al ₂ O ₃	Others
%	40	60	<1

PHYSICAL PROPERTIES

	Numerical Value
Item	ZA40
Specific Gravity	4.60g/cm ³
Bulk density(LPD)	2.15-2.45g/cm ³
Vicker hardness(100g Load)	19 GPa
Melting Point	1900°C
Particle shape	Monoclinical tetragona
Chemical property	Amphoteric
Reaction with acid and alkali	NO
Maximum service temperature	1600°C
Crystal Size	≤20um
Reaction with carbon	Forming carbide since 1650°C
Color	Gray
Specific heat capacity(cal/g.C)	0.2205(50-500°C)
Heat conductivity	0.2718 cal/cm ² .sec.°c
Linear expansivity (X10-6)	6.82(100-700°C)

PACKAGING

- 25kg drum + pallet/bag
- Larger size bags available on request

MAIN APPLICATIONS

- Polishing composite floors;
- Grinding composite stainless steel;
- Providing a matte uniform surface for implants, surgical tools, etc.;
- Cleaning and finishing sensitive electronic components;
- Surface profiling of aluminum or composite materials;
- Achieving a smooth, consistent finish on tools and molds.



JiangSu Henglihong Industrial Co., Ltd.
 Shuofang Industrial Park, Xinwu District,
 Wuxi City, Jiangsu Province
 contact@hlh-js.com
 Phone : +86 180-6835-1533
www.hlh-js.com