



Alumina Boats

Nextgen Advanced Materials supplies high-quality alumina boats in different sizes. Customized production is available. Multiple sizes of boats and custom manufacturing are available.

Product Description

You can rest assured to buy customized Nextgen Alumina Boats from us. We look forward to cooperating with you, if you want to know more, you can consult us now, we will reply to you in time! Alumina boats are ceramic products with high thermal conductivity, compressive strength, and thermal shock resistance. Alumina boats can be used under high temperature for evaporation and do not contaminate most molten metals. High Purity Alumina Ceramic Boat is used for testing laboratory and a variety of industrial analysis.



Ceramic characteristic table

	Name	99 Porcelain	95 Porcelain	Zirconium oxide
	Ingredients	Al ₂ O ₃ ≥ 99%	Al ₂ O ₃ ≥ 95%	ZrO ₂ ≥ 94%
Physical characteristics	Density	3.85	3.6	5.9
	Water absorption rate %	0	0	0
	Sintering temperature °C	1690	1670	1650
Physical characteristics	Hardness HV	1700	1600	1400
	Flexural strength 4pt	> 3500	> 2900	> 11000
	Compressive strength kgf/cm ²	30000	25000	25000
Thermodynamic characteristics	Maximum operating temperature: °C	1500	1400	1600
	Coefficient of thermal expansion	8	7.8	10
	10-6/°C			
	0-1000°C			
	Heat shock force T (°C)	200	220	350
Heat conductivity W/m.k	31	22	3	
Electrical characteristics	Volume resistivity Ω.cm	> 10 ¹²	> 10 ¹²	> 10 ¹²
	Insulation breaking strength KT/m	18	16	15
	Dielectric constant 1MHZ (E)	9.2-10.5	9.0-10	12.5

Specification table of porcelain Ark (manual measurement, for reference only)

NO.	Specifications	Upper mouth size /mm	Bottom size /mm
1	45*22	45*22*15	37*13*15
2	60*30	60*30*15	53*22*15
3	50*28	50*27*15	41*20*15
4	90*60	90*60*18	82*50*18
5	120*60	120*60*18	108 * 50 * 18

Specification

Parameters	UNIT	Al 99	Al 95
Al ₂ O ₃ Content	%	99	95
Density	g/m ³	3.85	3.6
water absorption	%	0	0
Sintering temperature	°C	1690	1670
Hardness	HV	1700	1600
Compressive strength	Kgf/cm ²	30000	25000
Max. Working Temperature	°C	1500	1400
Thermal Conductivity	W/(m K)	31	22
Volume Resistivity	Ω.cm	>10 ¹²	>10 ¹²



Dielectric Constant	MHZ(E)	9.2-10.5	9.0-10
Customization		Available	Available

No.	Size (mm)	Upper OD (mm)	Bottom OD (mm)
1	45*22	45*22*15	37*13*15
2	60*30	60*30*15	53*22*15
3	50*28	50*28*15	41*20*15
4	90*60	90*60*18	82*50*18
5	120*60	120*60*18	108*50*18