

Raw Materials for Sanitary Ware & Electrical Insulator industries

مواد اولیه صنایع چینی بهداشتی و مقره سازی

Chemical Analysis

Code	U-1	ARK-20-L	AC-35	AC-50	AC-60	AC-80	A-SEM-10
Type	Ball clay						Kaoline
SiO ₂	69 - 72	69 - 72	68 - 70	65 - 68	65 - 68	62 - 65	44 - 45
Al ₂ O ₃	17 - 19	17 - 19	18 - 20	19 - 21	20 - 22	26.5 - 27.5	37 - 38
Fe ₂ O ₃	< 1	1.5 - 2	< 1.5	< 2	< 1.5	< 1	< 2
TiO ₂	≤ 1	1 - 1.5	< 1.3	< 1.3	< 1.5	< 1	< 2
Na ₂ O	< 0.2	< 1	< 0.2	< 0.2	1 - 2	< 1	0.2 - 0.5
K ₂ O	< 0.3	1.5 - 2	< 0.5	< 0.5	1 - 2	< 1	
CaO	1.5 - 2	< 0.4	1.5 - 2	1.5 - 2	< 1	< 1	< 0.5
MgO	< 0.5	< 0.3	< 0.5	< 0.5	0.5 - 1	0.5 - 1	< 0.5
L.O.I	5 - 7	6 - 7	5 - 7	6 - 7	6 - 7	9 - 11	13-14
Mineralogical Analysis	-----	-----	-----	-----	-----	-----	Kaolinite (> 92%), Anatase and Quartz
Physical & Thermal Properties at 1180°C/ 6 h							1173°C / 6h'
Strengtn (kg/cm2)	Green	-----	-----	-----	-----	-----	7 ± 1
	Dried	27 - 30	28 - 35	28 - 35	40 - 45	50 - 58	23 ± 2
	Fired	450 - 500	250 - 300	550 - 600	750	450 - 550	350 - 400
Fired Shrinkage	9 - 10	10 - 11	9.5 - 10.5	9.5 - 10.5	9.5 - 10.5	8 - 9	-----
Coefficient of thermal Expansion at 500°C (α × 10⁻⁷°C⁻¹)	-----	-----	-----	-----	-----	-----	44
% Water Absorption	1 - 2	1 - 2	< 1	0.8 - 1.2	1 - 2	2 - 3	-----
Plasticity	28 - 30	28 - 30	30 - 33	30 - 33	30 - 33	28 - 30	-----
Color Analysis	L= 80 a = 2.5 b = 13.2	L= 55 a = 7.5 b = 4.2	L= 60 a = 2.2 b = 10	L= 62 a = 2.5 b = 11	L= 70 a = 4.2 b = 9	L= 82 a = 1.9 b = 9.6	L= 74 ± 1 a = 4 ± 0.5 b = 3.5 ± 0.5
Application	Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware, electrical insulator	Porcelain Bodies, Sanitary Ware
Sizing	< 40 mm, < 10 mm, Powder						0-12 mm
Packing	Big bag, Bulk						
Delivery Place	Tabas - Robate Khan						-----