

Chemical Analysis							
Code		U-1	ARK-20-L	AC-35	AC-50	AC-60	AC-80
Type	Ball clay						
SiO ₂		69 - 72	69 - 72	68 - 70	65 - 68	65 - 68	62 - 65
AL ₂ O ₃		17 - 19	17 - 19	18 - 20	19 - 21	20 - 22	26.5 - 27.5
Fe ₂ O ₃		< 1	1.5 - 2	< 1.5	< 2	< 1.5	< 1
TiO ₂		≤ 1	1 - 1.5	< 1.3	< 1.3	< 1.5	< 1
Na ₂ O		< 0.2	< 1	< 0.2	< 0.2	1 - 2	< 1
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
MgO		< 0.5	< 0.3	< 0.5	< 0.5	0.5 - 1	0.5 - 1
L.O.I		5 - 7	6 - 7	5 - 7	6 - 7	6 - 7	9 - 11
Physical & Thermal Properties at 1180°C/ 6 h							
Strength (kg/cm ²)	Dried	27 - 30	28 - 35	28 - 35	40 - 45	50 - 58	28 - 33
	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
% 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		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
Application		Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware	Sanitary ware, electrical insulator
Sizing	< 40 mm, < 10 mm, Powder						
Packing	Big bag, Bulk						
Delivery Place	Tabas - Robate Khan						
*Samples are tested under company laboratory condition.							

Document No: SA-HO-PL-FM12
Updated: 10-10-2024

Chemical Analysis		
Code	A-SEM-10	
Type	Kaolin	
SiO ₂	44 - 45	
AL ₂ O ₃	37 - 38	
Fe ₂ O ₃	< 2	
TiO ₂	< 2	
Na ₂ O + K ₂ O	< 0.5	
CaO	< 0.5	
MgO	< 0.5	
L.O.I	13-14	
Mineralogical Analysis	Kaolinite (> 92%), Anatase and Quartz	
Physical & Thermal Properties at 1173°C / 68'		
Strength (kg/cm ²)	Green	7 ± 1
	Dried	23 ± 2
	Fired	>50
Coefficient of thermal Expansion at 500°C (α×10 ⁻⁷ °C ⁻¹)	44	
Color	L= 74 ± 1 a = 4 ± 0.5 b = 3.5 ± 0.5	
Application	Porcelain Bodies, Sanitary Ware	
Sizing	0-12 mm	
Packing	Big bag - Bulk	

*Samples are tested under company laboratory condition

Document No: SA-HO-PL-FM14
Updated: 10-10-2024