

TECHNICAL DATA SHEET

PRODUCT					
HYWITE SUPERB BALL CLAY		A very white refractory Ball Clay, high firing, medium plasticity, suitable for applications such as tableware, tiles, glazes and engobes.			
CHEMICAL ANALYSIS (MEAN VALUES. THESE DO NOT REPRESENT A SPECIFICATION.)					
ELEMENT		UNITS	TYPICAL VALUE	MIN	MAX
Silicon Oxide	SiO ₂	%	49.0	46.0	49.0
Titanium Dioxide	TiO ₂	%	0.90	0.7	1.1
Aluminium Oxide	Al ₂ O ₃	%	33.0	31.0	36.0
Iron Oxide	Fe ₂ O ₃	%	1.1	0.9	1.3
Calcium Oxide	CaO	%	0.20		
Magnesium Oxide	MgO	%	0.30		
Potassium Oxide	K ₂ O	%	1.8	1.5	2.1
Sodium Oxide	Na ₂ O	%	0.2		
Loss of Ignition	LOI	%	14.0	12.0	16.0
Moisture Content		%	3.0		

PARTICLE SIZE DISTRIBUTION (EQUIVALENT SPHERICAL DIAMETER)		
APERTURE	UNITS	TYPICAL VALUE
>125 micron	% Retained	1.5
>53 micron	% Retained	2.5
<5 micron	% Passing	94
<2 micron	% Passing	84
<1 micron	% Passing	75
<0.5 micron	% Passing	63

PHYSICAL PROPERTIES				
	UNITS	TYPICAL VALUE	MIN	MAX
Methylene Blue Index (MBI)	mg.g ⁻¹	26	20	32
Modulus of Rupture (Dried at 110°C)	MN.m ⁻²	5.5		
Water soluble salts	wt %	0.1		

CASTING DATA	
	TYPICAL VALUE
Casting concentration (mass % solids)	65
M75 sodium silicate + Na ₂ CO ₃ demand (mass%) 7 poise	0.9
M75 sodium silicate + Na ₂ CO ₃ demand (mass%) 5 poise	1.3

FIRED PROPERTIES %			
	1120°C	1180°C	1240°C
Brightness	78	72	68
Water absorption	11.0	6.5	4.0
Linear contraction	11.8	14.0	15.0

PRODUCT SIZE
The products are available in 25kgs Bags.