

Bell DarkTM

Bell Dark is a fine-grained ball clay with good fired colour, strength and plasticity, that can be used in casting and plastic formed bodies. Primary applications are dinnerware and artware.

TYPICAL PROPERTIES

CHEMICAL ANALYSIS

SiO ₂	(%)	58.9
Al ₂ O ₃	(%)	26.8
Fe ₂ O ₃	(%)	1.1
TiO ₂	(%)	2.1
K ₂ O	(%)	0.7
Na ₂ O	(%)	0.2
CaO	(%)	0.2
MgO	(%)	0.4
L.O.I.	(% at 950°C)	9.9
Carbon	(%)	0.4

PHYSICAL PROPERTIES

Water of Plasticity	(%)	33.5
Dry Shrinkage	(%)	6.1
Dry M.O.R.**	(psi)	560
pH		4.1
M.B.I.	(meq/100g)	8.0
Specific Surface Area	(sq-m/g)	24.1
Soluble SO ₄ ***	(ppm)	Low

FIRED PROPERTIES

Total Shrinkage	(%)	
Cone 5		12.7
Cone 10		15.6
Absorption	(%)	
Cone 5		12.5
Cone 10		6.1
P.C.E		38

PARTICLE SIZE

%<20	(microns)	97
%< 10	(microns)	94
%< 5	(microns)	85
%< 2	(microns)	75
%< 1	(microns)	63
%< 0.5	(microns)	52
%< 0.2	(microns)	38

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First Edition

Production Site

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** Modulus of Rupture
Specimens:
De-aired, Extruded, 50% Ball
Clay, 50% Flint

*** Soluble So₄ (ppm):
Low: Trace to 150
Med - 150 to 450
High - Greater than 450

The data quoted are determined by the use of Imerys Standard Test Methods, copies of which will be supplied on request. Every precaution is taken in production to ensure the products conform to our published data. Since the products are based on naturally occurring materials, we reserve the right to change these data should it become necessary. Sales are in accordance with our "Conditions of Sale", copies of which will be supplied on request.

