



## ZIRCOPAQUE1 MICRON S - 62% Zr

RESIDUE TEST						
300MESH	500MESH	800MESH	Zn	U	Th	U+Th
NIL	NIL	NIL	<55 ppm	<220 ppm	<117 ppm	<337 ppm

CHEMICAL TEST					
ZrO <sub>2</sub>	HfO <sub>2</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>
64.419	1.172	33.282	0.052	0.102	1.189
STANDARD					
64.211	1.198	33.738	0.098	0.165	1.308

WHITE GLAZE TEST	L	a	b
PACKED BATCH	87.69	0.82	1.72
STANDARD	88.01	0.80	1.55
			DELTA E=0.363

BLACK GLAZE TEST	L	a	b
PACKED BATCH	48.41	0.09	3.39
STANDARD	48.19	0.20	3.56
			DELTA E=0.363

PARTICLE REPORT							
	D-50	D-90	D-97	%OF PARTICLES BELOW			
				10MIC.	5MIC.	2MIC.	1MIC.
PACKED BATCH	1.03	2.39	3.23	100	100	83.71	48.51
STANDARD	1.19	3.15	4.08	100	99.08	75.61	39.41
Grain Size	S.G.	Size mm	Moisture (%)	Density g/cm <sup>3</sup>	L whiteness	Hardness	PH
d <sub>50</sub> - 1.1 μ	4.5	0.001 mm	0.70%	0.8	87.69	7.5 on the MOHs scale	> 7

# O P A Q U E

C E R A M I C S

NAVRATNA CORPORATE PARK  
Office no. 207 & 208 "A" Block  
Opp. Dishman corporate house  
iscon ambali bopal road  
ambali, ahmedabad, 380058



*Handwritten signature*



White Glaze Strip Test and Lab Values 1080°C

STANDARD			Packed Batch		
L	A	B	L	A	B
88.01	0.80	1.55	87.69	0.82	1.72

Black Glaze Strip Test and Lab Values 1080°C

STANDARD			Packed Batch		
L	A	B	L	A	B
48.19	0.20	3.56	48.41	0.09	3.39



*Rinal*

# OPAQUE

CERAMICS  
NAVRATNA CORPORATE PARK  
Office no. 207 & 208 "A" Block  
Opp. Dishman corporate house  
iscon ambali bopal road  
ambali, ahmedabad, 380058



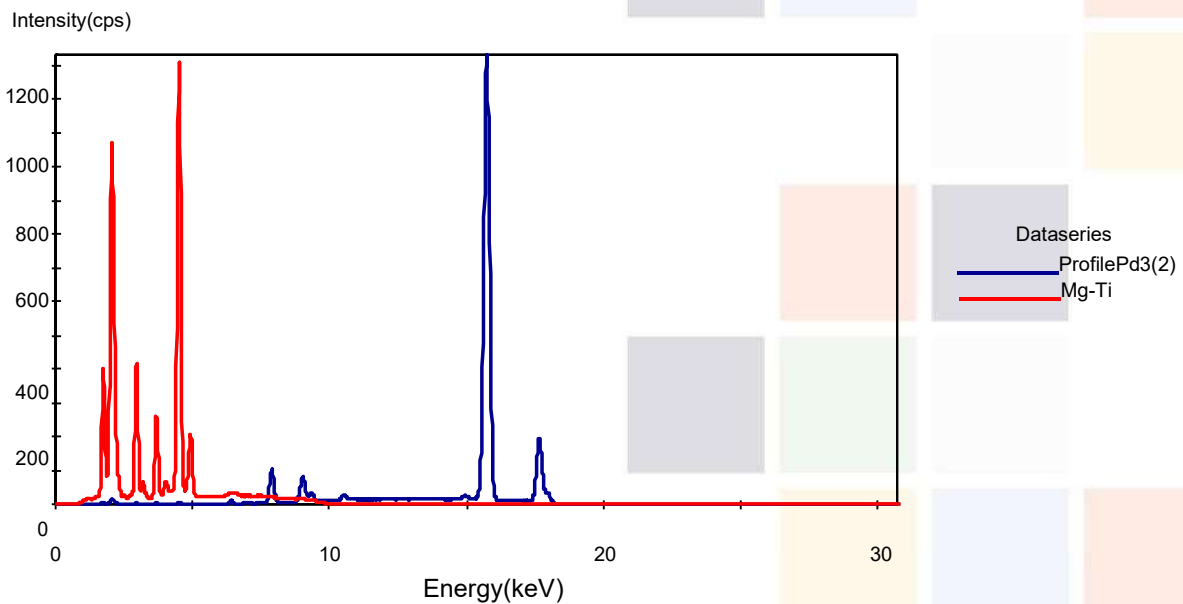
OPERATOR:INSTRUMENT  
OPERATOR

AnalysisMethod:OPAQUE2021

AnalyteConcentrationTable

Element	Line	Concentration
ZrO2	Ka	64.419 Wt %
HfO2	La	1.172 Wt %
SiO2	K	33.282 Wt %
Fe2O3	Ka	0.052 Wt %
TiO2	Ka	0.102 Wt %
Al2O3	Ka	1.189 Wt %

Spectra for all conditions



RADIOACTIVITY		
U		283 PPM
TH		116 PPM
U + TH		399 PPM



*Handwritten signature*

**OPAQUE**

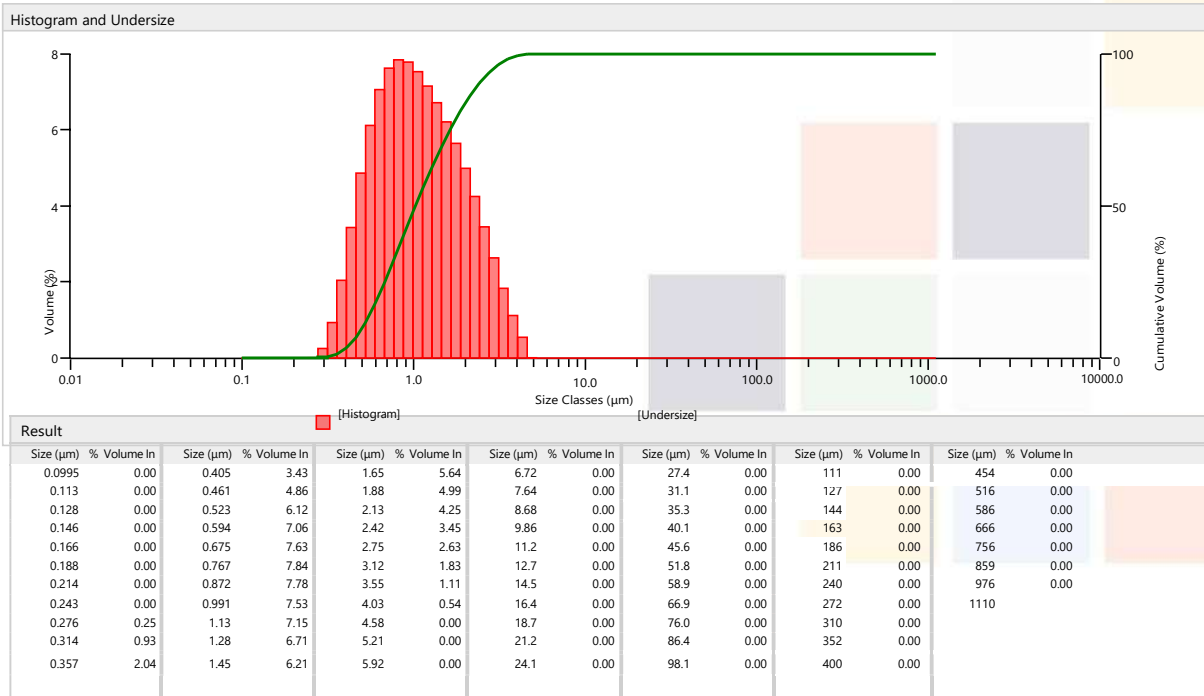
CERAMICS

NAVRATNA CORPORATE PARK  
Office no. 207 & 208 "A" Block  
Opp. Dishman corporate house  
iscon ambali bopal road  
ambali, ahmedabad, 380058



# OPAQUE CERAMICS PVT. LTD.

Analysis	Result
<b>Particle Name</b> ZIRCOPAQUE (1 MICRON) <b>Particle Refractive Index</b> 1.930 <b>Particle Absorption Index</b> 0.100 <b>Dispersant Name</b> Water <b>Dispersant Refractive Index</b> 1.330 <b>Scattering Model</b> Mie <b>Analysis Model</b> General Purpose <b>Weighted Residual</b> 0.92 % <b>Laser Obscuration</b> 9.84 % <b>Ultrasonication Duration (SOP)</b> 1.00 s	<b>Specific Surface Area</b> 6619 m <sup>2</sup> /kg <b>D [3,2]</b> 0.906 μm <b>D [4,3]</b> 1.26 μm <b>Dv (10)</b> 0.503 μm <b>Dv (50)</b> 1.03 μm <b>Dv (90)</b> 2.39 μm <b>Dv (97)</b> 3.23 μm <b>Volume Below (1) μm</b> 48.51 % <b>Volume Below (2) μm</b> 83.71 % <b>Volume Below (5) μm</b> 100.00 % <b>Volume Below (10) μm</b> 100.00 %



# OPAQUE

CERAMICS

NAVRATNA CORPORATE PARK  
 Office no. 207 & 208 "A" Block  
 Opp. Dishman corporate house  
 iscon ambali bopal road  
 ambali, ahmedabad, 380058

