



PRODUCT : ZIRCOPAQUE PREMIUM (5 MICRON-C5)

RESIDUE TEST

300 MESH	500 MESH	800 MESH	Zn	U	Th	U+Th
NIL	NIL	NIL	<50 ppm	<220 ppm	<117 ppm	<337 ppm

CHEMICAL TEST

ZrO ₂	HfO ₂
64.411	1.196
STANDARD	
64.211	1.198

ZIRCON TEST

	L	a	b
PACKED BATCH	96.94	0.42	3.69
STANDARD	96.80	0.35	4.00
			DELTA E:-0.347

WHITE GLAZE TEST

	L	a	b
PACKED BATCH	87.75	1.59	0.51
STANDARD	87.89	1.61	0.49
			DELTA E:-0.391

BLACK GLAZE TEST

	L	a	b
PACKED BATCH	47.73	0.10	4.75
STANDARD	47.05	0.15	4.61
			DELTA E:-0.354

MAGNETIC IRON TRACES :

NIL

MOISTURE :-

0.70 %

PARTICLE REPORT

	D-50	D-90	D-97	% OF PARTICLES BELOW			
				10 MIC.	5 MIC.	2 MIC.	1 MIC.
BATCH NO : C5/D-11/0011	1.15	3.01	4.03	100	99.39	75.13	42.94
STANDARD	1.19	3.15	4.08	100	99.08	75.61	39.41



OPAQUE

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NAVRATNA CORPORATE PARK

Office no. 207 & 208 "A" Block

Opp. Dishman corporate house

iscon ambali bopal road

ambali, ahmedabad, 380058



White Glaze Strip Test and Lab Values 1080°C

STANDARD			Packed Batch		
L	A	B	L	A	B
87.89	1.61	0.49	87.75	1.59	0.51

Black Glaze Strip Test and Lab Values 1080°C

STANDARD			Packed Batch		
L	A	B	L	A	B
47.85	0.15	4.61	47.73	0.10	4.75



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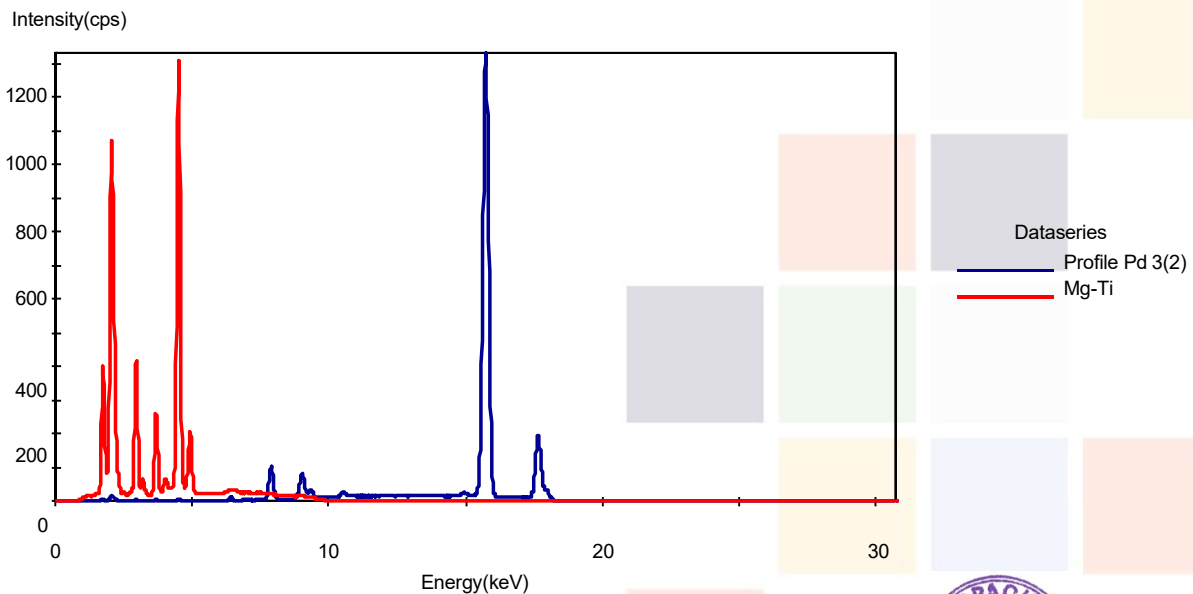
OPERATOR: INSTRUMENT
OPERATOR

Analysis Method: OPAQUE 2021

Analyte Concentration Table

Element	Line	Concentration
ZrO2	Ka	64.411 Wt %
HfO2	La	1.196 Wt %

Spectra for all conditions



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



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OPAQUE

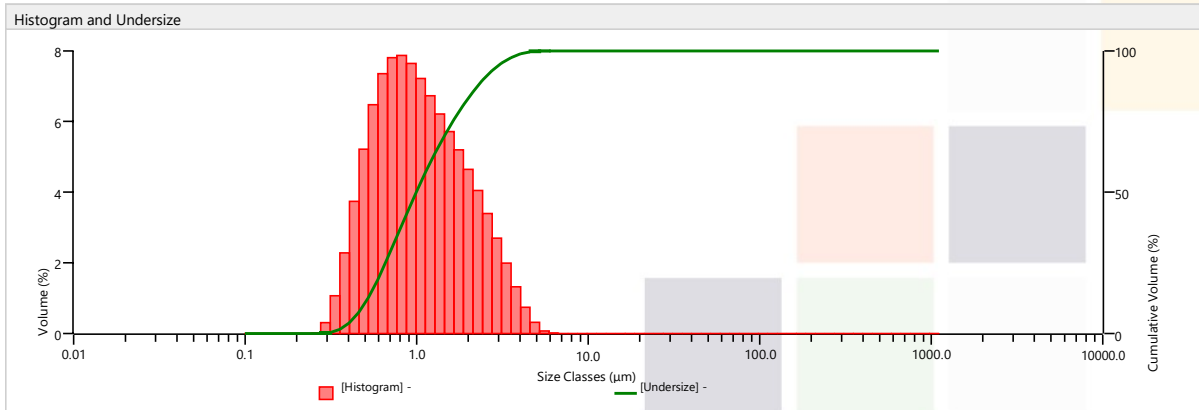
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OPAQUE CERAMICS PVT. LTD.

Analysis	Result
Particle Name ZIRCOPAQUE (5 MICRON)	Specific Surface Area 6751 m ² /kg
Particle Refractive Index 1.930	D [3,2] 0.889 µm
Particle Absorption Index 0.100	D [4,3] 1.27 µm
Dispersant Name Water	Dv (10) 0.491 µm
Dispersant Refractive Index 1.330	Dv (50) 0.995 µm
Scattering Model Mie	Dv (90) 2.47 µm
Analysis Model General Purpose	Dv (97) 3.43 µm
Weighted Residual 0.88 %	Volume Below (1) µm 50.26 %
Laser Obscuration 9.38 %	Volume Below (2) µm 83.13 %
Ultrasonication Duration (SOP) 1.00 s	Volume Below (5) µm 99.83 %
	Volume Below (10) µm 100.00 %



Result									
Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0995	0.00	0.405	3.74	1.65	5.19	6.72	0.00	111	0.00
0.113	0.00	0.461	5.21	1.88	4.65	7.64	0.00	127	0.00
0.128	0.00	0.523	6.47	2.13	4.05	8.68	0.00	144	0.00
0.146	0.00	0.594	7.35	2.42	3.39	9.86	0.00	163	0.00
0.166	0.00	0.675	7.81	2.75	2.70	11.2	0.00	186	0.00
0.188	0.00	0.767	7.87	3.12	1.99	12.7	0.00	211	0.00
0.214	0.00	0.872	7.64	3.55	1.32	14.5	0.00	240	0.00
0.243	0.00	0.991	7.22	4.03	0.74	16.4	0.00	272	0.00
0.276	0.30	1.13	6.72	4.58	0.31	18.7	0.00	310	0.00
0.314	1.07	1.28	6.21	5.21	0.07	21.2	0.00	352	0.00
0.357	2.27	1.45	5.71	5.92	0.00	24.1	0.00	400	0.00

OPAQUE
CERAMICS

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Arvind