



ZIRCON PATTA - 50% 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 ₂	HfO ₂	SiO ₂	Fe ₂ O ₃	TiO ₂	Al ₂ O ₃
52.282	1.045	36.657	0.118	0.361	1.945
STANDARD					
52.189	1.089	37.288	0.210	0.380	2.677

WHITE GLAZE TEST

	L	a	b
PACKED BATCH	86.94	0.13	1.60
STANDARD	86.71	0.14	1.43
			DELTA E=0.286

BLACK GLAZE TEST

	L	a	b
PACKED BATCH	47.35	0.55	2.46
STANDARD	47.31	0.87	2.60
			DELTA E=0.352

PARTICLE REPORT

	D-50	D-90	D-97	%OF PARTICLES BELOW			
				10MIC.	5MIC.	2MIC.	1MIC.
PACKED BATCH	1.30	3.94	17.1	94.18	91.99	71.76	34.69
STANDARD	1.56	4.54	19.50	92.81	85.33	59.19	29.25
Grain Size	S.G.	Size mm	Moisture (%)	Density g/cm ³	L whiteness	Hardness	PH
d50 - 1.1 μ	4.5	0.001 mm	0.70%	0.8	86.94	7.5 on the MOHs scale	> 7

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NAVRATNA CORPORATE PARK
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Opp. Dishman corporate house
iscon ambali bopal road
ambali, ahmedabad, 380058



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White Glaze Strip Test and Lab Values 1080°C

STANDARD			Packed Batch		
L	a	b	L	a	b
86.71	0.14	1.43	86.94	0.13	1.60

Black Glaze Strip Test and Lab Values 1080°C

Packed Batch			STANDARD		
L	A	B	L	A	B
47.35	0.55	2.46	47.31	0.87	2.60

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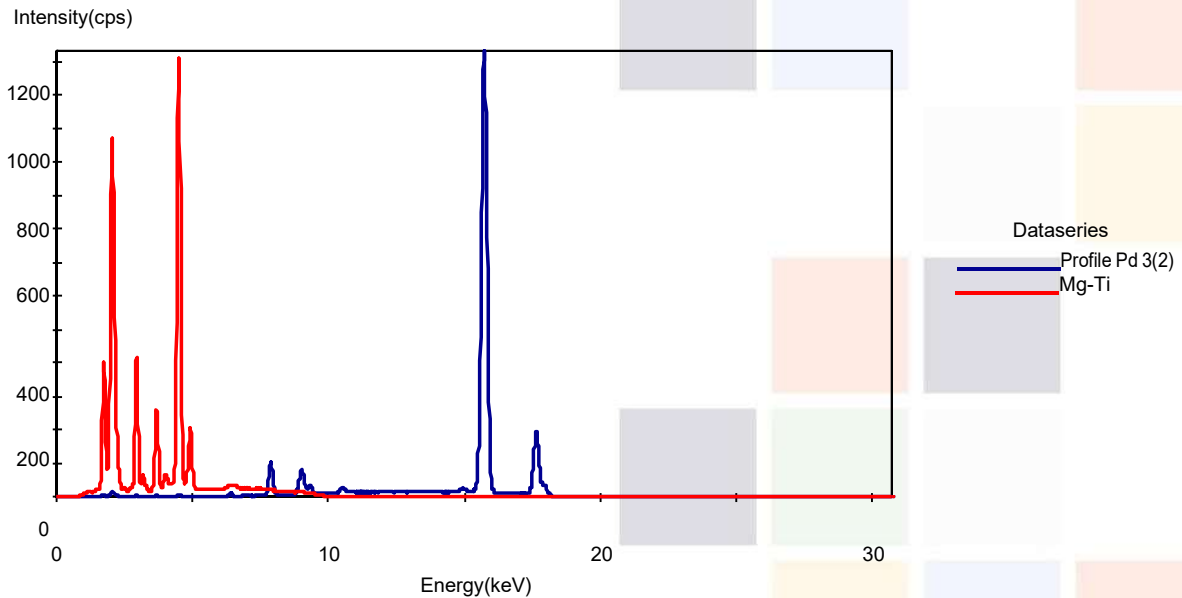
**OPERATOR: INSTRUMENT
OPERATOR**

AnalysisMethod: OPAQUE ZIRCON 2022

Analyte Concentration Table

Element	Line	Concentration
ZrO2	Ka	52.282 Wt %
HfO2	La	1.045 Wt %
SiO2	K	36.657 Wt %
Fe2O3	Ka	0.118 Wt %
TiO2	Ka	0.361 Wt %
Al2O3	Ka	1.945 Wt %

Spectra for all conditions



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



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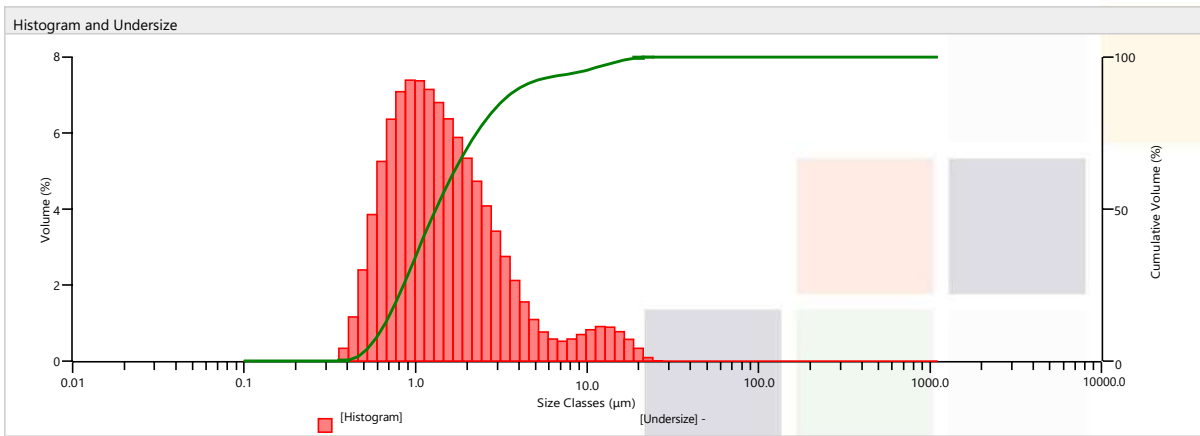
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Analysis	Result
Particle Name ZIRCON PATT Particle Refractive Index 1.930 Particle Absorption Index 0.100 Dispersant Name Water Dispersant Refractive Index 1.330 Scattering Model Mie Analysis Model General Purpose Weighted Residual 0.94 % Laser Obscuration 7.59 % Ultrasonication Duration (SOP) 1.00 s	Specific Surface Area 5083 m ² /kg D [3,2] 1.18 μm D [4,3] 2.26 μm Dv (10) 0.628 μm Dv (50) 1.32 μm Dv (90) 4.09 μm Dv (97) 12.1 μm Volume Below (1) μm 34.37 % Volume Below (2) μm 70.10 % Volume Below (5) μm 92.13 % Volume Below (10) μm 95.70 %



Result											
Size (μm)	% Volume In	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	1.16	1.65	5.89	6.72	0.52	27.4	0.00	111	0.00
0.113	0.00	0.461	2.40	1.88	5.34	7.64	0.58	31.1	0.00	127	0.00
0.128	0.00	0.523	3.85	2.13	4.73	8.68	0.70	35.3	0.00	144	0.00
0.146	0.00	0.594	5.25	2.42	4.08	9.86	0.82	40.1	0.00	163	0.00
0.166	0.00	0.675	6.37	2.75	3.41	11.2	0.90	45.6	0.00	186	0.00
0.188	0.00	0.767	7.08	3.12	2.75	12.7	0.89	51.8	0.00	211	0.00
0.214	0.00	0.872	7.39	3.55	2.12	14.5	0.77	58.9	0.00	240	0.00
0.243	0.00	0.991	7.37	4.03	1.55	16.4	0.57	66.9	0.00	272	0.00
0.276	0.00	1.13	7.15	4.58	1.09	18.7	0.33	76.0	0.00	310	0.00
0.314	0.00	1.28	6.80	5.21	0.76	21.2	0.09	86.4	0.00	352	0.00
0.357	0.33	1.45	6.37	5.92	0.57	24.1	0.00	98.1	0.00	400	0.00



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