



Typical certificate Of Analysis

Product	Hydroxyapatite
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Report No.	Batch No.	Mfg.: Date	Exp.: Date	Quantity
HA-13-10	T20230914	Sep.2023	Sep.2025	50 Kg

General Characteristics		
Appearance	White powder	Complies
Taste	Tasteless	Complies
Odor	Odorless	Complies
Solubility	In ethanol & water - Insoluble	Complies
	In dilute hydrochloric acid - soluble	Complies
	In dilute nitric acid - soluble	Complies

Chemical Analysis				
Parameter	Refrence	Production Standard	Unit	Results
Assay (Ca)	ISIRI 10701-1 BP	35-45	%	38.43
Assay (P2O5)	E341(iii)	38.5-48	%	43.53
Heavy metals (as Pb)	USP39	Max=20	ppm	Complies
Lead*	ISIRI 16438 ISIRI 16144	Max=20	ppm	Complies
Arsenic	ISIRI 14408	Max=1	ppm	Complies
Loss on drying	USP39	Max=5	%	1.05
Loss on ignition (800°C)	FCC551	Max=8	%	1.4
*Residual Solvents	USP39		ppm	Not Founded

*No inorganic solvent has been used.

Physical Analysis				
Particle size/Sieve analys	-	<150 μ m		
Density	-	2.89 g/cm ³		
Melting Point	ISIRI 4887	-	°C	1670

Microbiological Analysis				
Total aerobic microbial count	ISIRI 20111	Max=500	cfu/gm	<10
Total yeast and mold count	ISIRI 20111	Max=10	cfu/gm	< 10
E.coli	ISIRI 20111	Negative/gm	Negative/gm	Absent
Pseudomonas aeruginosa	ISIRI 20111	Negative/gm	Negative/gm	Absent
Candida albicans	ISIRI 20112	Negative/gm	Negative/gm	Absent
Staphylococcus aureus	ISIRI 20111	Negative/gm	Negative/gm	Absent

Technical Manager:	
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