

CERTIFICATE OF ANALYSIS (MATERIAL DATA SHEET)

Supplier/ Exporter	Cementation India Pvt Ltd.		
Product & HSN Code	Fly Ash & 26219000		
Origin	India	Source	Coal Based Thermal Power Station - Mundra, India
Type/Class/Standard	ASTM C619 CLASS F		
Result	Acceptable	Mfg. Month	January' 2023
CAS No.	68131-74-8	Exp. Month	January' 2024

<u>Test activities</u>	<u>Limits</u>	<u>Code</u>	<u>FLY ASH Results</u>
Loss on ignition	<= 6.0%	ASTM C618	0.89%
Chloride	<= 0.10%	ASTM C618	0.01%
Sulfuric Trioxide (SO ₃)	<= 5.0%	ASTM C618	0.90%
Free calcium oxide	<= 1.5%	ASTM C618	0.19%
Reactive Calcium Dioxide	<= 10.0%	ASTM C618	6.01%
Reactive Silicon Dioxide	>= 25.0%	ASTM C618	50.11%
Aluminum oxide (Al ₂ O ₃)	>=15.0%	ASTM C618	19.24%
Iron oxide (Fe ₂ O ₃)		ASTM C618	11.09%
Silicon Dioxide (SiO ₂) + Aluminum oxide (Al ₂ O ₃) + Iron oxide (Fe ₂ O ₃)	Total >= 70.0%	ASTM C618	80.44%
Equivalent Alkalis (Na ₂ O + 0.658K ₂ O)	<= 5.0%	ASTM C618	1.79%
Magnesium Oxide (MgO)	< 5.0%	ASTM C618	4.07%
Soluble phosphate	< 100mg/kg	ASTM C618	47 mg/kg
Fineness (Category S)	<=34%	ASTM C618	17.23%
Activity index		ASTM C618	
- 7 days	>= 75.0%	ASTM C618	79.00%
- 28 days	>= 75.0%	ASTM C618	87.00%
- 90 days	>= 86.0%	ASTM C618	93.50%
Soundness (Expansion)	<= 1.0%	ASTM C618	0.41%
Particle density	+ - 200kg/m ³	ASTM C618	200 kg/ m ³
Initial setting time	minutes	ASTM C618	200
Water requirement	<- 95.0%	ASTM C618	89.56%
Moisture	3 max	ASTM C618	0.03%

QC Dept.

