

An independent testing laboratory specialising in the testing of cementitious materials

## PREPARED FOR TITAN CEMENT Ltd. HULL

REPORT REFERENCE	Titan	123
CLIENT REFERENCE	CHEMISTRY	2023
SHIP REFERENCE	"12-23	
SAMPLE	ORDINARY PORTLAND CEMENT	
DATE OF RECEIPT OF SAMPLE	21-Nov-23	
DATE OF TESTS	21-Nov-23	to 19-Dec-23
DATE OF REPORT	19-Dec-23	

ALL RESULTS ARE BASED ON SAMPLE RECEIVED FROM THE CLIENT: TESTED AS RECEIVED.

### CHEMICAL COMPOSITION :- by mass, as received

IR	0.48 %	(BSEN 196-6:2010 )
SO <sup>3</sup>	3.23 %	(BSEN 196-3:2016)
LOI	2.52 %	(BSEN 196-3:2016)
K <sub>2</sub> O	0.53 %	(BSEN 196-3:2016)
Na <sub>2</sub> O	0.25 %	(BSEN 196-3:2016)
Na <sub>2</sub> O (eq)	0.60 %	(BSEN 196-3:2016)
Chloride	0.01 %	(BSEN 196-3:2016)

The following results are determined by XRF by an outside accredited laboratory.

SiO <sub>2</sub>	20.12 MPa	By XRF
Al <sub>2</sub> O <sub>3</sub>	4.12 MPa	By XRF
Fe <sub>2</sub> O <sub>3</sub>	3.81 MPa	By XRF
CaO	63.4 MPa	By XRF
MgO	1.48 MPa	By XRF

The following results are not UKAS accredited:-

L.S.F.	0.96 %
C <sub>3</sub> A	4.48 %
C <sub>3</sub> S	54.16 %
C <sub>2</sub> S	16.84 %
C <sub>4</sub> AF	11.58 %
Free Lime	2.13 %

END OF REPORT

SIGNED:



Certificate signed by:

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