



Heidelberg Materials

Tanzania Portland Cement Public Limited Company

P.O.Box 1950, Dar es Salaam-Tanzania

Telephone: +255 746 810930

Fax: +255 746 810931

Info@twigacement.com

www.twigacement.com

MONTHLY CERTIFICATE OF CHEMICAL & PHYSICAL TESTS

TWIGA PLUS, CEM II/B-M CLASS 42.5 N

MAY, 2025

Sampled and tested in accordance with the requirements of the Tanzanian Bureau of Standards

TZS 727-1/EAS 18-1. Equivalent to EN 197-1

CHEMICAL TEST RESULTS			
Test	Unit	Test results	Specified requirements
Loss on Ignition	[%]	7.40	No requirement
Insoluble Residues	[%]	1.42	Less than 5.0%
CaO	[%]	54.7	No requirement
SiO ₂	[%]	21.9	No requirement
CaO/SiO ₂	[-]	2.50	Not less than 2.0%
Al ₂ O ₃	[%]	5.72	No requirement
Fe ₂ O ₃	[%]	3.74	No requirement
MgO	[%]	1.70	Not more than 5.0%
SO ₃	[%]	2.45	Less than 3.5%
K ₂ O	[%]	0.43	No requirement
Na ₂ O	[%]	0.27	No requirement
P ₂ O ₅	[%]	0.52	No requirement
TiO ₂	[%]	0.86	No requirement
MnO	[%]	0.08	No requirement
(Na ₂ O+ 0.658 K ₂ O)	[%]	0.55	No requirement
Cl ⁻	[%]	0.001	Less than 0.10%
PHYSICAL TEST RESULTS			
Density	[kg/m ³]	3100	No requirement
Specific Surface (Blaine)	[m ² /kg]	454	No requirement
Sieving Residue on 45 mic. mesh	[%]	7.9	No requirement
Initial Setting Time	[Minutes]	153	Not less than 60 minutes
Final Setting Time	[Minutes]	211	No requirement
Soundness (Expansion)	[mm]	1.0	Not more than 10.0 mm
Compressive Strength 2 days	[MPa]	17.0	More than 10.0 MPa
Compressive Strength 28* *days*	[MPa]	45.1	Between 42.5 and 62.5 Mpa

Remarks: * The 28 days strength is the average of previous month.

Wazo Hill, 2025/06/05th


Quality Control Manager


Plant Manager


Commercial Director