Heidelberg Materials

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MONTHLY CERTIFICATE OF CHEMICAL & PHYSICAL TESTS

TWIGA MEGA, CEM III/B-SR CLASS 42.5N

SEPTEMBER,2026

Sampled and tested in accordance with the applicable standard test methods, and assessed for compliance with the requirements of the Tanzanian Bureau of Standards

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

CHEMICAL TEST RESULTS				
Test Parameters	**Unit**	**Test results**	**Standard Test Methods**	**Specified requirements**
Loss on Ignition	[%]	2.95	EN 196-2	No requirement
Insoluble Residues	[%]	1.14	EN 196-2	Less than 5.0%
CaO	[%]	47.0	EN 196-2 (XRF)	No requirement
SiO_2	[%]	27.1	EN 196-2 (XRF)	No requirement
CaO/SiO_2	[-]	1.74	Calculated from EN 196-2 results	Not less than 2.0%
Al_2O_3	[%]	10.3	EN 196-2 (XRF)	No requirement
Fe_2O_3	[%]	2.33	EN 196-2 (XRF)	No requirement
MgO	[%]	4.66	EN 196-2 (XRF)	Not more than 5.0%
SO_3	[%]	3.05	EN 196-2 (XRF)	Less than 3.5%
K_2O	[%]	0.41	EN 196-2 (XRF)	No requirement
Na_2O	[%]	0.20	EN 196-2 (XRF)	No requirement
P_2O_5	[%]	0.24	EN 196-2 (XRF)	No requirement
MnO	[%]	0.18	EN 196-2 (XRF)	No requirement
TiO_2	[%]	0.75	EN 196-2 (XRF)	No requirement
$(Na_2O+ 0.658K_2O)$	[%]	0.47	Calculated from EN 196-2 results	No requirement
Cl^-	[%]	0.001	EN 196-2 (XRF)	Less than 0.10%
PHYSICAL TEST RESULTS				
Test Parameters	**Unit**	**Test results**	**Standard Test Methods**	**Specified requirements**
Density	[kg/m^3]	3010	SOP / validated method	No requirement
Specific Surface (Blaine)	[m^2/kg]	488	EN 196-6	No requirement
Sieving Residue on 45mic. mesh	[%]	6.5	SOP / validated method	No requirement
Initial Setting Time	[Minutes]	196	EN 196-3	Not less than 60 minutes
Soundness (Expansion)	[mm]	0.5	EN 196-3	Not more than 10.0 mm
Compressive Strength 2 days	[MPa]	12.5	EN 196-3	More than 10.0 MPa
Compressive Strength 28 days*	[MPa]	52.0	EN 196-1	Between 42.5 and 62.5 MPa

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

Wazo Hill, 2026/10/02nd

Quality Control Manager | **Plant Manager** | **Commercial Director**

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