



SIMBA
CEMENT
STRENGTH WITHIN

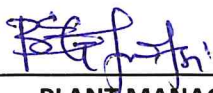
DATE: 01/06/2022

CERTIFICATE OF CHEMICAL & PHYSICAL TESTS (SIMBA Brand Portland Limestone Cement)

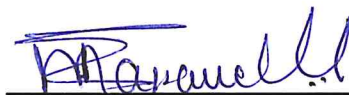
Sampled and tested in accordance with the requirements of Tanzania Bureau of Standards 'No. TZS 760'

PARAMETER	TEST RESULTS	SPECIFICATION
		TZS 727-1 = EN 197-1
CHEMICAL TESTS:		CEM II/A-L 42.5N
Loss on Ignition (%)	8.10	
SiO ₂ (%)	18.01	
Al ₂ O ₃ (%)	5.59	
Fe ₂ O ₃ (%)	2.62	
CaO (%)	61.70	
MgO (%)	0.76	5.0 Max.
SO ₃ (%)	2.47	3.5 Max.
K ₂ O (%)	0.11	
Na ₂ O (%)	0.24	
Cl (%)	0.01	0.1 Max
TiO ₂ (%)	0.35	
P ₂ O ₅ (%)	0.04	
Total (%)	100.00	
Insoluble Residue (IR) (%)	2.15	
C3A (%)	10.39	
Freelime (CaO _f) (%)	1.86	
PHYSICAL TESTS:		
Air permeability - Blaine (cm ² /g)	4453	
Compressive Strength (Mpa):	ISO 2days	≥10 N/mm ²
	ISO 7days	-
	ISO 28days	≥42.5 N/mm ² ; ≤62.5 N/mm ²
Vicat test: Initial setting (minutes)	110	≥60 Minutes
	Final setting (minutes)	122
Expansion (Lechatelier's) (mm)	1.0	10 Max.
Specific gravity (g/cc)	3.0	

REMARKS: The average temperature during the test did not exceed 22°C; corresponding to 71.6°F.
The test results shown are monthly composite cement sample for April 2022.



PLANT MANAGER



QUALITY ASSURANCE MANAGER



TANGA CEMENT PLC

Head Office: Pongwe Factory Area, P O Box 5053, Tanga, Tanzania
Tel: +255 27 2644 500-2 / 2610 600 / 784 644 500, Fax: +255 27 2646 148 / 2646 425

Directors: L Masha (Chairperson)*, P Rutabanzibwa (Deputy Chairperson)*, R Swart (Managing)**,
P de Jager (CFO)***, K Omar*, Rob Wessels**, R Mbiliinyi*

Company Secretary: Quresh Ganjee*
*Tanzanian, **South African

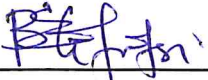
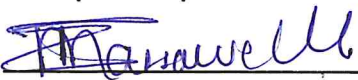


SIMBA
CEMENT
STRENGTH WITHIN

DATE: 01/06/2022

CERTIFICATE OF CHEMICAL & PHYSICAL TESTS (SIMBA Brand Portland Composite Cement)

Sampled and tested in accordance with the requirements of Tanzania Bureau of Standards 'No. TZS 760'

PARAMETER	TEST RESULTS		SPECIFICATION
			TZS 727-1 = EN 197-1
CHEMICAL TESTS:			CEM II/B-M 32.5N
Loss on Ignition (%)		9.84	
SiO ₂ (%)		17.58	
Al ₂ O ₃ (%)		5.32	
Fe ₂ O ₃ (%)		2.56	
CaO (%)		60.93	
MgO (%)		0.78	5.0 Max.
SO ₃ (%)		2.36	3.5 Max.
K ₂ O (%)		0.11	
Na ₂ O (%)		0.15	
Cl (%)		0.01	0.1 Max
TiO ₂ (%)		0.35	
P ₂ O ₅ (%)		0.01	
Total (%)		100.00	
Insoluble Residue (IR) (%)		2.63	
C3A (%)		9.77	
Freelime (CaO _f) (%)		1.78	
PHYSICAL TESTS:			
Air permeability - Blaine (cm ² /g)		4129	
Compressive Strength (N/mm ²):			-
	ISO 7days	27.8	≥16 N/mm ²
	ISO 28days	37.6	≥32.5 N/mm ² ; ≤52.5 N/mm ²
Vicat test: Initial setting (minutes)		122	≥75 Minutes
Final setting (minutes)		140	-
Expansion (Lechatelier's) (mm)		1.0	10 Max.
REMARKS: The average temperature during the test did not exceed 22°C; corresponding to 71.6°F. The test results shown are monthly composite cement sample for April 2022.			
 PLANT MANAGER		 QUALITY ASSURANCE MANAGER	



TANGA CEMENT PLC

Head Office: Pongwe Factory Area, P O Box 5053, Tanga, Tanzania
Tel : +255 27 2644 500-2 / 2610 600 / 784 644 500, Fax : +255 27 2646 148 / 2646 425

Directors: L Masha (Chairperson)*, P Rutabanzibwa (Deputy Chairperson)*, R Swart (Managing)**,
P de Jager (CFO)**, K Omar*, Rob Wessels**, R Mbiliinyi*

Company Secretary: Quresh Ganjjee*
*Tanzanian, **South African


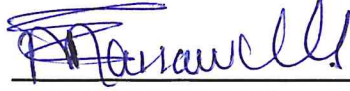


SIMBA
CEMENT
STRENGTH WITHIN

DATE: 01/06/2022

**CERTIFICATE OF CHEMICAL & PHYSICAL TESTS
(SIMBA Brand Portland Composite Cement)**

Sampled and tested in accordance with the requirements of Tanzania Bureau of Standards 'No. TZS 760'

PARAMETER	TEST RESULTS	SPECIFICATION
		TZS 727-1 = EN 197-1
CHEMICAL TESTS:		
		CEM II/B-M 32.5R
Loss on Ignition (%)	9.37	
SiO ₂ (%)	17.56	
Al ₂ O ₃ (%)	5.40	
Fe ₂ O ₃ (%)	2.54	
CaO (%)	61.19	
MgO (%)	0.79	5.0 Max.
SO ₃ (%)	2.38	3.5 Max.
K ₂ O (%)	0.11	
Na ₂ O (%)	0.26	
Cl (%)	0.01	0.1 Max
TiO ₂ (%)	0.35	
P ₂ O ₅ (%)	0.04	
Total (%)	100.00	
Insoluble Residue (IR) (%)	2.62	
C3A (%)	10.02	
Freelime (CaO _f) (%)	2.05	
PHYSICAL TESTS:		
Air permeability - Blaine (cm ² /g)	4076	
Compressive Strength (Mpa):	ISO 2days	≥10 N/mm ²
	ISO 7days	-
	ISO 28days	≥32.5 N/mm ² ; ≤52.5 N/mm ²
Vicat test: Initial setting (minutes)	123	≥75 Minutes
Final setting (minutes)	139	-
Expansion (Lechatelier's) (mm)	1.0	10 Max.
REMARKS: The average temperature during the test did not exceed 22°C; corresponding to 71.6°F. The test results shown are monthly composite cement sample for April 2022.		
 _____ PLANT MANAGER		 _____ QUALITY ASSURANCE MANAGER



TANGA CEMENT PLC

Head Office: Pongwe Factory Area, P O Box 5053, Tanga, Tanzania
Tel: +255 27 2644 500-2 / 2610 600 / 784 644 500, Fax: +255 27 2646 148 / 2646 425

Directors: L. Masha (Chairperson)*, P. Rutabanzibwa (Deputy Chairperson)*, R. Swart (Managing)**,
P de Jager (CFO)**, K. Omar*, Rob Wessels**, R. Mbiliinyi*

Company Secretary: Quresh Ganijee*
*Tanzanian, **South African