

**TANZANIA BUREAU OF STANDARDS**

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DATE

2024-10-07**TH 08**

TBS Code No.

TT 19217

Page 1 of 2

Member of the International Organization for Standardization (ISO), Codex Alimentarius Commission (WHO/FAO), Agent for ISO and other National Standards Bodies

**TEST REPORT
BCL/06055/2024**

This report is issued in accordance with Section 4 (1) (c) of the Standards Act No. 2 of 2009. The report shall not be published, other than in full, without prior written approval of the Director General, TBS.

**“A SADCAS ACCREDITED TESTING LABORATORY****TEST-3 0003**

| | |
|-----------------------------------|-----------------------------------------------------------------------|
| Client: | LAKE CEMENT LIMITED |
| Client address: | GARDEN STREET, PLOT NO 773/ BLOCK 40 OHIO STREET , DAR-ES-SALAAM |
| Sample: | ONE (1) SAMPLE OF CEMENT CEM 1 NYATI 42.5N - ORDINARY PORTLAND CEMENT |
| Site and position sampled: | LAKE CEMENT LIMITED |
| Sampling plan: | UNKNOWN |
| Date of sampling: | 2024-08-30 |
| Date received: | 2024-09-02 |
| Date started: | 2024-09-03 |
| Date finished: | 2024-10-07 |
| Specification: | TZS 727 (PART 1): 2018 (2ND ED) |
| Test method: | AS INDICATED IN THE TABLE OF RESULTS ACCORDING TO THE STANDARD |
| BL Number: | |

1.0 INTRODUCTION

A sample of 50Kgs of cement (**NYATI CEMENT grade 42.5N**) was submitted to TBS Building and Construction Laboratory for testing whether it conforms to **TZS 727:2018**. The sample was given TBS Code No. **TT 17290**.

2.0 ATTENTION

This test report pertains ONLY to the sample brought to TBS by the client for type testing. The results should not be regarded as representative of quality of any commercial consignment nor be used for any commercial negotiations. Representative test samples for commercial negotiations are sampled by TBS Inspectors.

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TEST REPORT
BCL/06055/2024**2.0 TEST RESULTS**

The sample was analyzed as per specified method and the given results pertain only to the sample submitted to the TBS BUILDING AND CONSTRUCTION LABORATORY for testing.

TABLE: Results of Cement

| S/N | Test/Characteristic | Test Method | Requirements | Results and uncertainty | Pass/Fail |
|-----|----------------------------------------------------|-------------|-----------------------|-------------------------|-----------|
| 1 | *Standard consistence, % | EN 196-3 | - | 30.6 ± 1.8 | - |
| 2 | *Initial setting time, Minutes | EN 196-3 | 60 (Minimum) | 189 ± 16.4 | Pass |
| 3 | *Soundness (Expansion), mm | EN 196-3 | 10 (Maximum) | 1.1 ± 0.5 | Pass |
| 4 | * Early strength (2 days), N/mm ² | EN 196-1 | 10 (Minimum) | 16.2 ± 2.1 | Pass |
| 5 | ■ * Standard strength (28 days), N/mm ² | EN 196-1 | Between 42.5 and 62.5 | 40.4 ± 5.1 | Pass |
| 6 | Loss of Ignition, % | EN 196-1 | 5 (Maximum) | 2.0 | Pass |

- 1) The reported uncertainty is an expanded uncertainty, calculated using a coverage factor of 2 which gives a level of confidence of approximately 95%.
- 2) Results with black dot (■) indicates decision rule applied.
- 3) Results with asterisk (*) indicate accredited parameters.
- 4) DECISION RULE "pass" when results and its uncertainty range is within limits or results uncertainty range overlap the limit, "fail" when results and its uncertainty range is outside the limits.

3.0 MARKING AS PER TZS 727:2018

The manufacturer's name, address (factory physical address) and/or trademark

-Marked

Standard designation of cement

-Marked

Net weight

-Marked

Date of packing and /or batch number

-Marked

4.0 REMARK

The sample conforms to **TZS 727:2018** "Composition, specification and conformity criteria for common cement specification" for the tested parameters. The test of this sample was destructive.

Reported by:**Verified by:****Approved by:**

Justinianus Kampuni

Heriel Msangi

Eng. Mahona William

Analyst

Technical Signatory

Head of Laboratory