



PNG TAIHEIYO CEMENT LIMITED
 QUALITY CONTROL SECTION
 PHONE (675)472 7499 FAX (675)472 4218/1300

MONTHLY TEST RESULTS FOR September-2023

FOR Lae Clinker Grinding & Cement Packing Plant

The following Results of Test conducted in accordance with ASTM C150-20 for Type 1,
 Ordinary Portland Cement (OPC)-Paradise Cement.

DESCRIPTION OF TEST				
CHEMICAL COMPOSITION		ASTM C150	UNIT	RESULTS
Silicon Dioxide	(SiO ₂)		%	20.30
Aluminum Oxide	(Al ₂ O ₃)		%	5.54
Ferric Oxide	(Fe ₂ O ₃)		%	3.20
Calcium Oxide	(CaO)		%	63.94
Magnesium Oxide	(MgO)	Max. 6.0	%	1.44
Sulphur Trioxide	(SO ₃)	Max. 3.5	%	2.26
Loss-On-Ignition	(LOI)	Max. 3.5	%	2.39
Alkali	(0.658K ₂ O+Na ₂ O)		%	0.46
Phosphorus Pentoxide	(P ₂ O ₅)		%	0.28
Insoluble Residue	(IR)	Max. 1.5	%	0.20
Limestone		Max. 5.0	%	3.5
L.S.F			%	95.1
S.M				2.32
I.M				1.73
C ₃ S			%	57.8
C ₂ S			%	14.6
C ₃ A			%	9.3
C ₄ AF			%	9.7
PHYSICAL				
Blaine (Air Permeability App)		Min. 2600	cm ² /g	3,320
45µm Residue			%	11.7
Initial Time		Min. 45	mins	143
Final Time		Max. 375	mins	258
Water Demand			%	24.4
Compressive Strength	3Days	Min. 12	N/mm ²	26.9
	7Days	Min. 19	N/mm ²	34.8
	28Days	Min. 28	N/mm ²	41.8

We hereby certify that the content of the report is correct and accurate and that the paradise cement herein has been made and/or tested in accordance with the above specification and with the requirement of customers order.

Date : December 1st,2023
 PNG Taiheiyō Cement Limited
 Lae Plant

Mr. Kazuhiro Tanaka
 Policy & Planning Manager/QC