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Die Akkreditierung gilt für die in der Urkundenanlage
D-PL-11217-01-01 aufgeführten Prüfverfahren.

Project: Contract for Testing, Surveillance and Certification No. 11/2362
Producer/plant: ROYAL EL MINYA CEMENT COMPANY/EI Minya
Order date: 29.03.2011
Purpose of sampling: Test according to EN 197-1 / Audit sampling R 6 / 2018
Product: Portland-cement EN 197-1: 2011 - CEM I 52,5 N
Quantity: 5 kg Portland cement EN 197-1 – CEM I 52,5 N
Samplers/Label: SGS, -
Day of delivery: 02.01.2019
Test period: January – February 2019

Berlin, 19.02.2019



i.V. Dr. Matthias Reese
Head of laboratory



i.A. Dipl.-Ing. Melanie Zarbock
Testing

1. TEST RESULTS

1.1 Specific Surface, Setting Time and Soundness

Determination of setting time and soundness acc. to DIN EN 196-3:2017-03 and of specific surface acc. to DIN EN 196-6:2010-05

attributes	Test result	Requirement	Evaluation
Specific surface ¹⁾ [cm ² /g]	3.675	-	-
Initial Setting time ²⁾	190 min.	≥ 45 min	fulfilled
Finish	250 min.	-	-
Soundness ³⁾ [mm]	0,7	≤ 10	fulfilled

¹⁾ Blaine, density: 3,10 g/cm³ / porosity: e = 0,50

²⁾ Vicat-device, Standard consistence: 28,0 %

³⁾ Le-Chatelier

1.2 Compressive Strength

Determination of strength acc. to DIN EN 196-1:2016-11

Prism	Compressive strength [MPa]		
	Early strength		Standard strength
No.	2 days testing day: 23.01.2019	7 days	28 days testing day: 04.02.2019
1	30,7	-	76,7
	31,0	-	76,7
2	30,6	-	75,8
	31,4	-	76,6
3	31,2	-	76,5
	31,0	-	76,6
Main value	30,9	-	76,5
Requirement	≥ 20	-	≥ 52,5
Evaluation	fulfilled	-	fulfilled

1.3 Chemical Analysis

Determination of chemical properties acc. to DIN EN 196-2:2013-10

Property	Test result [mass-%]	Requirement [mass-%]	Evaluation
Loss on ignition	2,12	≤ 5,0	not fulfilled
Insoluble residue	0,18	≤ 5,0	fulfilled
Sulfate content (as SO ₃)	2,40	≤ 4,0	fulfilled
Chloride content (Cl ⁻)	0,04	≤ 0,10	fulfilled