



CEMENTOS ALFA, S.A,

Plant: MATAPORQUERA

ER Certificate: ER-0572/1998



QUALITY ANALYSIS CERTIFICATE - CEMENT

TYPICAL RESULTS

Cement Type: CEM I 52,5 R ma (EN 197-1)

PERIOD: AUGUST 2014

CE: 0099/CPR/A33/0831

The Quality Management System adopted in our company for the production and commercialization of cements and clinker, complies with UNE-EN-ISO 9001:2008, and it is certified by AENOR. It is also certified under IQNet network.

TESTS	Results	Specification EN 197-1
Chemical Characteristics		
Loss on Ignition %	1,81	≤ 5,0
SiO ₂ %	19,99	
Al ₂ O ₃ %	4,31	
Fe ₂ O ₃ %	3,41	
CaO %	63,60	
MgO %	1,44	
Na ₂ O %	0,15	
K ₂ O %	0,78	
Insoluble Residue %	0,51	≤ 5,0
Sulphates (SO ₃) %	3,34	≤ 4,0
Chlorides %	0,00	≤ 0,10
Physical and Mechanical Characteristics		
Normal Consistency Water %	30,0	
Initial Setting Time min	145	≥ 45
Final Setting Time min	190	
Soundness (Le Chatelier) mm	0,5	≤ 10
Specific Surface (Blaine) cm ² /g	5000	
Compressive Strength at 2 days MPa	40,9	≥ 30,0
Compressive Strength at 28 days MPa	68,2	≥ 52,5
Other Characteristics		
Na ₂ O equiv. %	0,66	≤ 0,75
Bogue Composition (mineral phases)		
C ₃ S %	61,9	
C ₂ S %	16,0	
C ₃ A %	6,0	
C ₄ AF %	11,0	

R-25-4-52/5-Z

Quality Manager

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