



CEMENTOS ALFA, S.A.

Plant: MATAPORQUERA

ER Certificate: ER-0572/1998



QUALITY ANALYSIS CERTIFICATE - CEMENT

TYPICAL RESULTS

Cement Type: **CEM I 42,5 R**
(EN 197-1)

PERIOD: AUGUST 2015

CE: 0099/CPR/A33/0154

N: 015/001358

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	%	2,78	≤ 5,0
SiO ₂	%	19,46	
Al ₂ O ₃	%	5,77	
Fe ₂ O ₃	%	2,37	
CaO	%	62,41	
MgO	%	1,69	
Na ₂ O	%	0,18	
K ₂ O	%	1,14	
Insoluble Residue	%	0,63	≤ 5,0
Sulphates (SO ₃)	%	3,27	≤ 4,0
Chlorides	%	0,01	≤ 0,10
Physical and Mechanical Characteristics			
Normal Consistency Water	%	29,5	
Initial Setting Time	min	175	≥ 60
Final Setting Time	min	225	
Soundness (Le Chatelier)	mm	0,0	≤ 10
Specific Surface (Blaine)	cm ² /g	3700	
Compressive Strength at 2 days	MPa	35,0	≥ 20,0
Compressive Strength at 28 days	MPa	57,9	42,5-62,5
Other Characteristics			
Na ₂ O equiv.	%	0,93	
Bogue Composition (mineral phases) *			
C ₃ S	%	54,6	
C ₂ S	%	19,2	
C ₃ A	%	12,6	
C ₄ AF	%	7,4	

* Corresponding to clinker composition

R-25-4-52/5-Z

Barrio la Estación, s/n.
39410 Mataporquera (Cantabria)
Tel. 942 770 058
Fax 942 770 243
info@alfainforma.com

Quality Manager



GRUPO
CEMENTOS
PORTLAND
VALDERRIVAS