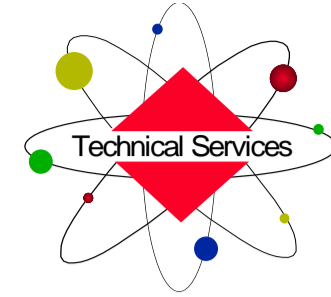




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 PH (09) 432 2656
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Type CEM I 52,5 N



Ciment Ordinaire

Issued to: Export Manager
Vessel: Yellow Moon
Voyage Number: 1137 **CO 50**
Code Number: 110825-275

	<u>Test Result</u>		<u>Requirements</u>	
			<i>Type GP</i> NZS 3122:2009	<i>EN 197-1</i>
<u>Compressive Strengths</u>				
ISO-CEN Prism	3 Days	31.1 MPa		20.0 MPa minimum
	7 Days	42.5 MPa	35 MPa (min)	
	28 Days	58.2 MPa	45 MPa (min)	52.5 Mpa (min)
<u>Physical Properties</u>				
Setting Time Initial		105 minutes	45 minutes (min)	60 mins (min)
Setting Time Final		3:30 hours	6 hours (max)	
Specific Surface		320 m²/Kg		
Soundness		1		10 (max)
<u>Chemical Properties</u>				
Insoluble Residue (IR) (Typical)		0.30 %	-	5.0 (max)
SiO ₂		21.41 %	-	
Al ₂ O ₃		3.61 %	-	
Fe ₂ O ₂		2.55 %	-	
CaO		64.33 %	-	
Magnesia (MgO)		0.96 %	-	5.0 (max)
Sulphur Trioxide (SO ₃)		1.93 %	3.5 (max)	4.0 (max)
Ignition Loss (LOI)		2.86 %	-	5.0 (max)
Na ₂ O (Sodium)		0.22 %	-	
K ₂ O (Potassium)		0.48 %	-	
Soda Equivalent (Na ₂ O + 0.658 K ₂ O)		0.54 %	-	
Freelime CaO		1.57 %	-	
<u>Potential Compounds</u>				
Tricalcium Silicate (C ₃ S)		65.8 %	-	
Dicalcium Silicate (C ₂ S)		11.8 %	-	
Tricalcium Aluminate (C ₃ A)		5.2 %	-	
Tetracalcium Alumino Ferrite (C ₄ AF)		7.8 %	-	

Note: No adjustment has been made to the Potential Compounds for the presence of mineral additions.

Typical Properties Of Ciment GP Ordinaire:	
Composition: Clinker:	91%
Secondary:	5%
Gypsum:	4%
Insolubles:	1.0%
Chlorine:	<0.01%

The above sample was tested as received in accordance with the current terms of registration and methods stated in NZS 3122:2009 with the exception of;

- Chemical Analysis to ASTM C114-10

THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL

Jim White
Quality System Co-ordinator
31/08/2011