



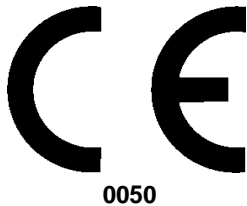
SULFATE Resisting Cement Data Sheet

Manufactured in: - Lansdown, Killaskillen, Kinnegad, Co. Westmeath, Ireland.

Date: 20/02/2020

Blast furnace Cement

I.S EN 197-1:2011	CEM III/A 52,5 L	29/08/2013
	Certificate of Conformity No: 0050 - CPR - 0107	
CE	CEM III/A 52,5 L	29/08/2013



Declared Composition (%)

<u>Constituents</u>	<u>Calcium Sulfate</u>
Portland Cement Clinker (K).....	Gypsum.....
Granulated blastfurnace slag (S).....	Other source of Calcium Sulfate.....
Natural pozzolana (P).....	
Natural calcined pozzolana (Q).....	
Siliceous fly ash (V).....	<u>Additives</u>
Calcareous fly ash (W).....	Grinding Aid.....
Burnt Shale (T).....	Ferrous Sulphate.....
Limestone (L).....	

Compressive Strengths (MPa)

<u>Time</u>	<u>Test Method</u>	<u>Mean Values</u>	<u>Range of Values</u>
2 Day	IS EN 196 - 1	22.4	16.0 - 26.0
7 Day	IS EN 196 - 1	39.7	32.0 - 42.0
28 Day	IS EN 196 - 1	58.2	53.0 - 62.0

Physical Properties

<u>Property</u>	<u>Test Method</u>	<u>Mean Values</u>	<u>Range of Values</u>
Specific density (Kg/M ³)	IS EN 196 - 6	3050	2950 - 3150
Specific surface (M ² /Kg)	IS EN 196 - 6	419	390 - 460
Initial setting time (min)	IS EN 196 - 3	159	130 - 250
Soundness (mm)	IS EN 196 - 3	0.5	0.0 - 4.0

Chemical Properties

<u>Property</u>	<u>Test Method</u>	<u>Mean</u>	<u>Range</u>	<u>Property</u>	<u>Test Method</u>	<u>Mean</u>	<u>Range</u>
LOI (%)	IS EN 196 - 2	2.6	1.0 - 4.0	SO ₃ (%)	IS EN 196 - 2	1.6	1.2 - 2.7
IR (%)	IS EN 196 - 2	0.1	0.1 - 2.0	K ₂ O (%)	IS EN 196 - 2	0.47	0.40 - 0.80
SiO ₂ (%)	IS EN 196 - 2	23.5	22.0 - 27.0	Na ₂ O (%)	IS EN 196 - 2	0.26	0.15 - 0.35
Al ₂ O ₃ (%)	IS EN 196 - 2	6.6	6.0 - 8.0	Cl (%)	IS EN 196 - 2	0.05	0.01 - 0.08
Fe ₂ O ₃ (%)	IS EN 196 - 2	2.0	1.3 - 2.8	FCaO (%)	ISO 29581 - 2	1.3	1.0 - 3.0
CaO (%)	IS EN 196 - 2	59.5	58.5 - 61.5	Na ₂ O _{eqv} (%)	IS EN 196 - 2	0.57	0.45 - 0.75
MgO (%)	IS EN 196 - 2	2.9	2.2 - 3.7	C ₃ A	IS EN 196 - 2	5.1	3.5 - 6.5
Cr(VI) (ppm)	IS EN 196 - 10	0.9	0.0 - 2.0				