



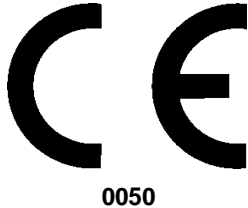
PREMIUM + Cement Data Sheet

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

Date: 20/02/2020

Portland - limestone Cement

I.S EN 197-1:2011	CEM II/A-L 42,5 N (1)	27/11/2009
	Certificate of Conformity No: 0050 - CPR - 0033	
CE	CEM II/A-L 42,5 N (1)	27/11/2009



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).....	

80 - 94 **3.0 - 5.0**
 - -
 - -
 - -
 - **< 0.1**
 - **< 0.3**
 - -
6 - 20

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	24.8	20.5 - 26.5
7 Day	IS EN 196 - 1	36.7	33.0 - 41.0
28 Day	IS EN 196 - 1	47.0	43.5 - 50.0

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	3060	2950 - 3150
Specific surface (M ² /Kg)	IS EN 196 - 6	434	390 - 460
Initial setting time (min)	IS EN 196 - 3	129	100 - 200
Soundness (mm)	IS EN 196 - 3	0.7	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	9.3	7.0 - 13.0	SO ₃ (%)	IS EN 196 - 2	2.2	2.0 - 3.5
IR (%)	IS EN 196 - 2	0.2	0.1 - 2.0	K ₂ O (%)	IS EN 196 - 2	0.48	0.40 - 0.80
SiO ₂ (%)	IS EN 196 - 2	16.4	15.0 - 19.0	Na ₂ O (%)	IS EN 196 - 2	0.21	0.15 - 0.35
Al ₂ O ₃ (%)	IS EN 196 - 2	4.4	4.0 - 5.0	Cl (%)	IS EN 196 - 2	0.06	0.01 - 0.08
Fe ₂ O ₃ (%)	IS EN 196 - 2	2.2	2.0 - 3.5	FCaO (%)	ISO 29581 - 2	1.3	1.0 - 3.0
CaO (%)	IS EN 196 - 2	67.0	64.0 - 69.0	Na ₂ O _{eqv} (%)	IS EN 196 - 2	0.52	0.45 - 0.75
MgO (%)	IS EN 196 - 2	1.2	1.0 - 1.9	C ₃ A	IS EN 196 - 2	7.8	5.0 - 8.5
Cr(VI) (ppm)	IS EN 196 - 10	0.8	0.0 - 2.0				