

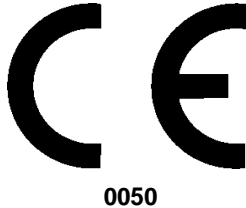
Cement Data Sheet

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

Date: 01/02/2021

Portland - limestone Cement

I.S EN 197-1:2011	CEM II/A-L 42,5 N	12/09/2005
	Certificate of Conformity No: 0050 - CPR - 0023	
CE	CEM II/A-L 42,5 N	12/09/2005



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).....	
Calcareous fly ash (W).....	
Burnt Shale (T).....	
Limestone (L).....	
	<u>Additives</u>
	Grinding Aid.....
	Ferrous Sulphate.....

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	31.9	28.0 - 34.0
7 Day	IS EN 196 - 1	48.3	45.5 - 50.5
28 Day	IS EN 196 - 1	58.4	55.0 - 61.0

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	3100	3000 - 3200
Specific surface (M ² /Kg)	IS EN 196 - 6	396	360 - 430
Initial setting time (min)	IS EN 196 - 3	111	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	5.2	3.0 - 7.5	SO ₃ (%)	IS EN 196 - 2	2.6	2.0 - 3.5
IR (%)	IS EN 196 - 2	0.1	0.1 - 2.0	K ₂ O (%)	IS EN 196 - 2	0.53	0.40 - 0.80
SiO ₂ (%)	IS EN 196 - 2	18.4	17.5 - 20.5	Na ₂ O (%)	IS EN 196 - 2	0.23	0.15 - 0.35
Al ₂ O ₃ (%)	IS EN 196 - 2	4.8	4.5 - 5.5	Cl (%)	IS EN 196 - 2	0.07	0.01 - 0.09
Fe ₂ O ₃ (%)	IS EN 196 - 2	2.4	2.0 - 3.5	FCaO (%)	ISO 29581 - 2	1.3	1.0 - 3.0
CaO (%)	IS EN 196 - 2	65.7	63.5 - 68.0	Na ₂ O _{eqv} (%)	IS EN 196 - 2	0.58	0.45 - 0.75
MgO (%)	IS EN 196 - 2	1.2	1.0 - 2.0	C ₃ A	IS EN 196 - 2	8.5	6.0 - 9.5
Cr(VI) (ppm)	IS EN 196 - 10	0.7	0.0 - 2.0				