



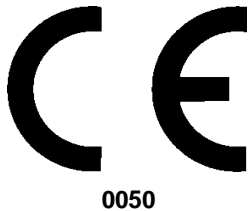
## PREMIUM + MAX Cement Data Sheet

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

Date: 20/02/2020

### Portland - limestone Cement

I.S EN 197-1:2011	<b>CEM II/A-L 42,5 N BAG</b>	02/03/2011
	Certificate of Conformity No: 0050 - CPR - 0578	
CE	<b>CEM II/A-L 42,5 N BAG</b>	02/03/2011



### 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	26.9	24.0 - 30.0
7 Day	IS EN 196 - 1	40.5	37.0 - 44.0
28 Day	IS EN 196 - 1	49.4	47.0 - 54.0

### Physical Properties

<u>Property</u>	<u>Test Method</u>	<u>Mean Values</u>	<u>Range of Values</u>
Specific density (Kg/M <sup>3</sup> )	IS EN 196 - 6	3090	3000 - 3200
Specific surface (M <sup>2</sup> /Kg)	IS EN 196 - 6	453	410 - 480
Initial setting time (min)	IS EN 196 - 3	158	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	6.0 - 12.0	SO <sub>3</sub> (%)	IS EN 196 - 2	2.0	1.5 - 3.0
IR (%)	IS EN 196 - 2	0.6	0.1 - 2.0	K <sub>2</sub> O (%)	IS EN 196 - 2	0.89	0.80 - 1.20
SiO <sub>2</sub> (%)	IS EN 196 - 2	16.4	15.0 - 19.0	Na <sub>2</sub> O (%)	IS EN 196 - 2	0.25	0.15 - 0.35
Al <sub>2</sub> O <sub>3</sub> (%)	IS EN 196 - 2	4.5	4.2 - 5.2	Cl (%)	IS EN 196 - 2	0.03	0.01 - 0.08
Fe <sub>2</sub> O <sub>3</sub> (%)	IS EN 196 - 2	2.7	2.3 - 3.8	FCaO (%)	ISO 29581 - 2	1.0	0.5 - 3.0
CaO (%)	IS EN 196 - 2	64.9	62.0 - 67.0	Na <sub>2</sub> O <sub>eqv</sub> (%)	IS EN 196 - 2	0.84	0.70 - 1.10
MgO (%)	IS EN 196 - 2	1.3	1.0 - 1.9	C <sub>3</sub> A	IS EN 196 - 2	7.3	5.0 - 8.5
Cr(VI) (ppm)	IS EN 196 - 10	0.2	0.0 - 2.0				