

Cement Data Sheet

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

Date: 15/03/2024

Portland Cement

I.S EN 197-1:2011	CEM I 52,5 N	08/11/2019
	Certificate of Conformity No: 0050 - CPR - 0974	
CE	CEM I 52,5 N	08/11/2019



Declared Composition (%)

<u>Constituents</u>	<u>Calcium Sulfate</u>
Portland Cement Clinker (K).....	Gypsum.....
Blastfurnace slag (S).....	Other source of Calcium Sulfate.....
Silica fume (D).....	
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	29.6	26.5 - 32.5
7 Day	IS EN 196 - 1	47.7	45.0 - 50.0
28 Day	IS EN 196 - 1	59.5	56.0 - 62.5

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	3106	3050 - 3200
Bulk density (T/M ³)	-	-	1.10 - 1.40
Specific surface (M ² /Kg)	IS EN 196 - 6	369	325 - 425
Initial setting time (min)	IS EN 196 - 3	130	90 - 190
Soundness (mm)	IS EN 196 - 3	0.6	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	3.2	1.5 - 4.0	SO ₃ (%)	IS EN 196 - 2	2.4	2.0 - 3.0
IR (%)	IS EN 196 - 2	0.1	0.1 - 2.0	K ₂ O (%)	IS EN 196 - 2	0.56	0.40 - 0.80
SiO ₂ (%)	IS EN 196 - 2	19.8	17.6 - 21.0	Na ₂ O (%)	IS EN 196 - 2	0.23	0.15 - 0.35
Al ₂ O ₃ (%)	IS EN 196 - 2	5.0	4.6 - 5.6	Cl (%)	IS EN 196 - 2	0.08	0.01 - 0.09
Fe ₂ O ₃ (%)	IS EN 196 - 2	2.8	2.0 - 3.5	FCaO (%)	ISO 29581 - 2	1.3	1.0 - 3.0
CaO (%)	IS EN 196 - 2	66.4	64.0 - 68.0	Na ₂ O _{eqv} (%)	IS EN 196 - 2	0.60	0.45 - 0.75
MgO (%)	IS EN 196 - 2	1.5	1.0 - 2.0	C ₃ A	IS EN 196 - 2	8.7	5.0 - 9.5
Cr(VI) (ppm)	IS EN 196 - 10	0.3	0.0 - 2.0				