

Kamianets Podilsky, 24th March 2023

CERTIFICATE OF QUALITY

Product: Portland Cement ПЦ III/A-K(U-B)-500P EN 197-1 CEM III/A-M(S-L)
42.5R BULK

Approx. 365 250 t

Exporter: JSC Podilsky cement, Ukraine

Importer: SERVPRODLAND SRL MD-4822, Republica Moldova

Shipped by train to border Oknitsa/Sokiryany in following wagons:

93027951, 93033264, 93047983, 93048270, 93048452

Destination: Dubasari Vechi, MD-4822, raionul Criuleni, Republica Moldova

1. The chemical composition of the clinker, %

Parameters	%	Parameters	%
SiO ₂	21.0 - 22.7	LSF	96.98 - 97.89
Al ₂ O ₃	4.5 - 5.5	MS	2.39 - 2.48
Fe ₂ O ₃	3.1 - 4.1	MA	1.39 - 1.46
CaO	65.5 - 67.5	C3S	60 - 62
SO ₃	0.5 - 1.3	C2S	13 - 15
MgO	1.4 - 1.7	C3A	7.5 - 7.7
K ₂ O	0.53 - 0.73	C4AF	10.6 - 11.6
Na ₂ O	0.18 - 0.24	F CaO	1.11 - 1.49

Chemical parameters are determined by X-ray analyzer.
Clinker minerals are estimated by Bogue method.

2. Physical and mechanical properties of cement, %

Fineness, sieve residue 32 mkm	%	3.0-7.0
Specific surface area, air permeability method	cm ² /g	4450-4750
Water of consistency	%	26.50 - 27.50
Setting time: initial	min.	120 - 150
final	min.	180 - 210
Soundness	mm	0
Compressive strength: 2 day	MPa	29.0 - 32.0
28 day	MPa	51.0 - 54.0

According to Ukrainian standard (EN 196-1:2016, IDT) ДСТУ EN 196-1:2019

We certify that the technical data were ascertained strictly.

Andrii Humeniuk
Head of TCD & Laboratory

