

1. THE CHEMICAL ANALYSIS OF THE LIMESTONE AND MINERALS

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Test parameter	1	2	3	4	5	6	7	8	9
(CaCO ₃ +MgCO ₃)	95.14	93.72	95.14	96.28	93.07	94.87	95.26	94.14	95.33
Insoluble substances in (HCl)	2.08	2.52	2.22	1.83	2.32	2.61	2.18	2.41	2.15
Including sand	0.69	1.76	0.77	0.52	0.67	0.63	1.13	2.05	1.55
Fe ₂ O ₃ + Al ₂ O ₃	0.69	0.78	0.43	0.43	0.60	0.50	0.73	0.78	1.05
Mn	0.012	0.003	0.002	0.004	0.003	0.005	0.004	0.004	0.002
Fe ₂ O ₃ (III)	0.22	0.42	0.15	0.21	0.16	0.14	0.30	0.36	0.39
Water-soluble substances	0.17	0.11	0.06	0.10	0.14	0.20	0.09	0.07	0.12
including SO ₂	0.020	0.012	0.031	0.007	0.026	0.034	0.008	0.012	0.010
SO ₂	0.020	0.012	0.031	0.007	0.026	0.034	0.008	0.012	0.010
Cl	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
SiO ₂	0.60	1.76	0.77	0.52	0.67	0.63	1.13	2.05	1.55
Content of sulfur (S)	0.01	<0.01	0.02	0.01	0.02	0.02	<0.01	<0.01	<0.01
Content of phosphorus (P)	0.05	0.06	0.02	0.03	0.04	0.05	0.05	0.06	0.06

Notice: 1 – Krasny Mak (powder), 2- Yuzhny -2 (stone), 3 – Skalistoye-3 (stone), 4 – Krasny Mak (stone), 5 – Skalistoye -2 (stone), 6 – Skalistoye -3 (powder), 7 – Yuzhny -2 (powder), 8 – Yuzhny -3 (stone), 9 – Yuzhny -3 (powder).

APPENDIX to the chemical analysis of the limestone and minerals

№	Name of indicator	Normative document for the test method
1	Mass fraction of calcium carbonate and magnesium carbonate in recalculation for calcium carbonate (CaCO_3 MgCO_3)	State Standard of Ukraine (GOST) 2138-78
2	Mass fraction of substances, insoluble in hydrochloric acid (HCl), including mass fraction of sand	GOST 3253-79 GOST 21138.6-78
3	Mass fraction of sesquialteral oxides, including mass fraction of iron in recalculation for Fe_2O_3	GOST 8253-79 GOST 21138.7-78
4	Mass fraction of manganese	GOST 21138.9-78
5	Mass fraction of ferric oxide (III)	GOST 21138.8-78
6	Mass fraction of water-soluble substances, including sulphates in recalculation for sulphate-ion	GOST 3253-79 GOST 21138.1-85
7	Mass fraction of ions into aqueous extract SO_4 and Cl	GOST 21138.2-85
8	Mass fraction of sand	GOST 19220-73
9	Contents of sulfur (S)	GOST 23260.5-78
10	Contents of phosphorus (P)	GOST 23260.6-78