MINERALNI BANI MUNICIPALITY

MINERAL SPRINGS

Chemical composition and healing properties of the mineral water

The mineral water - the most valuable natural wealth of the region - is hyperthermal - 54 - 59°C and is unique in its chemical composition and healing properties.

The National Resort Mineralni Bani is profiled for the treatment of diseases of the peripheral arteries of organic and functional type - Burger's disease, endarthritis, obliterating atherosclerosis, Raynaud's disease, conditions after thrombophlebitis, autonomic and diabetic angiopathies, scleroderma, etc.

Except them, the following diseases are treated with excellent results, too:

- **Musculoskeletal system** - rheumatism, arthritis, Sokolski-Buyo disease
- **Joint diseases** – arthrosis, conditions after bone fractures, polyarthritis, Bechterew's disease
- **Peripheral nervous system** – radiculitis, polyneuritis, sciatica, lumbago, plexitis, discopathy and discal hernia
- **Gynecological diseases** – inflammatory processes of the ovaries, infertility
- **Skin diseases** – eczema, psoriasis vulgaris, dermatitis, keratoderma, urticaria

 The mineral water is also used for drinking when there is sand in the kidneys, chronic gastritis and colitis, peptic ulcer disease, gastrointestinal diseases, inflammation of the bile and liver.

Suitable places for hydrotherapy and balneotherapy are Balneohotel "Bozhur" at PRO EAD, SBR "Ailin" and Public bath with mineral water.

Except them many other accommodations offer relaxing mineral water treatments.

CHEMICAL COMPOSITION OF THE MINERAL WATER

In one liter of water are contained:

Drilling 2VP

1. Аниони	mg/l	eq%
F^-	4,05	0,961
Cl^-	62,80	7,984
SO_4^{2-}	857,16	80,423
CO_3^{2-}	< 6,00	0,000
HCO_3^-	136,68	10,098
$HSiO_3^-$	-	-
NO_3^-	7,35	0,534
NO_2^-	< 0,05	0,000
Сума:	**1068,04**	**~100,00**

Сух остатък при 180°C	1517 mg/l
Сух остатък при 260°C	1489 mg/l
Електропроводимост	2030 µS/cm
pH	7,27

2. Катиони	mg/l	eq%
NH_4^+	< 0,05	0,000
Li^+	0,10	0,063
Na^+	317,30	58,933
K^+	20,18	2,204
Ca^{2+}	176,35	37,576
Mg^{2+}	3,00	1,056
Fe-общо($^{3+}$)	0,49	0,037
Mn^{2+}	0,84	0,131
Сума:	**518,27**	**~100,00**

H_2SiO_3	80,41 mg/l
Обща минерализация	1667 mg/l
Въглероден диоксид	22 mg/l
Сероводород	336,26 mg/l
Дебит	24,1 l/s
Температура	57,5 °C

Drilling 3VP

1. Аниони	mg/l	eq%
F^-	3,96	0,949
Cl^-	63,82	8,196
SO_4^{2-}	839,87	79,601
CO_3^{2-}	< 6,00	0,000
HCO_3^-	144,00	10,747
$HSiO_3^-$	-	-
NO_3^-	6,90	0,507
NO_2^-	< 0,05	0,000
Сума:	**1058,55**	**~100,00**

2. Катиони	mg/l	eq%
NH_4^+	< 0,05	0,000
Li^+	0,14	0,085
Na^+	318,70	58,387
K^+	21,84	2,353
Ca^{2+}	180,36	37,907
Mg^{2+}	3,16	1,095
Fe-общо($^{3+}$)	0,49	0,037
Mn^{2+}	0,89	0,136
Сума:	**525,58**	**~100,00**

Сух остатък при 180°C	1492 mg/l
Сух остатък при 260°C	1460 mg/l
Електропроводимост	2060 µS/cm
pH	7,23

H_2SiO_3	74,70 mg/l
Обща минерализация	1659 mg/l
Въглероден диоксид	20,68 mg/l
Сероводород	265,88 mg/l
Дебит	6,1 l/s
Температура	53,5 °C

Drilling 4VP

1. Аниони	mg/l	eq%
F^-	4,01	0,972
Cl^-	60,99	7,924
SO_4^{2-}	841,11	80,647
CO_3^{2-}	< 6,00	0,000
HCO_3^-	130,58	9,859
$HSiO_3^-$	-	-
NO_3^-	8,05	0,598
NO_2^-	< 0,05	0,000
Сума:	**1044,74**	**~100,00**

2. Катиони	mg/l	eq%
NH_4^+	< 0,05	0,000
Li^+	0,14	0,082
Na^+	322,50	58,780
K^+	20,52	2,199
Ca^{2+}	180,36	37,712
Mg^{2+}	3,10	1,069
Fe-общо($^{3+}$)	0,41	0,031
Mn^{2+}	0,83	0,126
Сума:	**527,86**	**~100,00**

Сух остатък при 180°C	1514 mg/l
Сух остатък при 260°C	1474 mg/l
Електропроводимост	2030 µS/cm
pH	7,27

H_2SiO_3	81,01 mg/l
Обща минерализация	1654 mg/l
Въглероден диоксид	21,56 mg/l
Сероводород	344,08 mg/l
Дебит	24,1 l/s
Температура	56,6 °C

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1. Аниони	mg/l	eq%
F^-	4,08	0,961
Cl^-	60,28	7,608
SO_4^{2-}	868,27	80,873
CO_3^{2-}	< 6,00	0,000
HCO_3^-	136,68	10,025
$HSiO_3^-$	-	-
NO_3^-	7,40	0,534
NO_2^-	< 0,05	0,000
Сума:	**1076,71**	**~100,00**

2. Катиони	mg/l	eq%
NH_4^+	< 0,05	0,000
Li^+	0,13	0,078
Na^+	328,00	59,232
K^+	20,40	2,166
Ca^{2+}	180,36	37,365
Mg^{2+}	2,96	1,011
Fe-общо($^{3+}$)	0,38	0,028
Mn^{2+}	0,80	0,120
Сума:	**533,03**	**~100,00**

Сух остатък при 180°C	1549 mg/l
Сух остатък при 260°C	1510 mg/l
Електропроводимост	2040 µS/cm
pH	7,25

H_2SiO_3	80,41 mg/l
Обща минерализация	1690 mg/l
Въглероден диоксид	22,90 mg/l
Сероводород	320,60 mg/l
Дебит	1,33 l/s
Температура	57,6 °C