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1,5

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SURFACE-ACTIVE PROPERTIES OF QUATERNARY AMMONIUM COMPOUNDS

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Abstract. The work is devoted to the study of turbidity values and the degree of purification in natural waters of mountain rivers using a water-soluble polyelectrolyte based on polyallyldimethylammonium chloride. The use of polyelectrolyte allows for a 1,5-fold reduction in dosage without compromising the effectiveness of sedimentation compared to other concentrations. The water-soluble polyelectrolyte forms stable complexes with heavy metal ions and is an effective agent for removing contaminants from natural and wastewater.

Keywords: water-soluble polyelectrolyte, polyallyldimethylammonium chloride, WPC-402, turbidity, purification degree, stable complex, natural water, wastewater

[7-9]

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5, 7 10 %- I.

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10

59024-2020.

0,45
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0,5 %

57162-2016.

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31870-2012

2-5 °

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0,45

1.2.3685-21

[10-12].
1,5 / ().

(2).

2 -

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		O ₃ ⁻	SO ₄ ²⁻	²⁺	g ²⁺	Na ⁺	+
.	7,3	104	36,9	58,1	4,3	8,2	1,8
.	7,8	91,5	22,6	25,3	11,0	7,7	2,3
.	7,0	91,5	102	74,6	7,0	4,4	2,2
.	8,1	140	51	27,2	3,7	8,2	2,6

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[10-12] -

1 , : - G = 20 ⁻¹ G = 150 ⁻¹

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1

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[2]

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3.

3 -

5 %

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							, %
.	0,03	0,00	0,21	1,23	0,23	12,21	86
.	0,03	0,00	0,23	1,12	0,27	12,32	92
.	0,07	0,00	0,13	1,26	0,41	13,25	87
.	0,10	0,00	0,16	0,21	0,26	9,23	94

86 94 %.

t = f(t),

I 2.

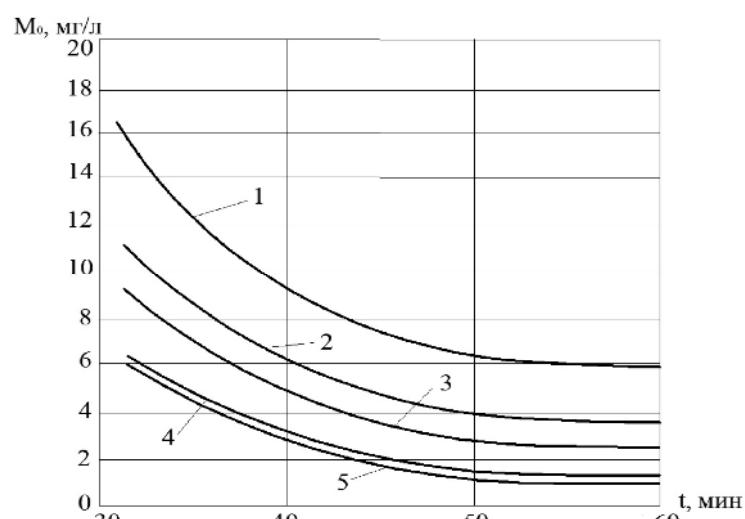
I 2,

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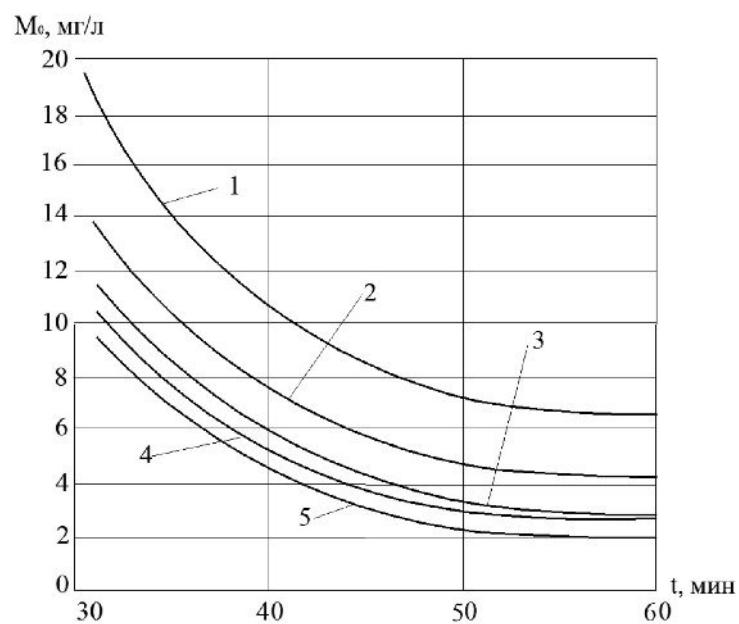
5 %.

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(₀ = 0,41 /).



1 – () (t) : 1 – 1 %, 2 – 7 %; 3 – 10 %, 4 – 2 %; 5 – 5 %



2 – () (t) : 1 – 1 %, 2 – 7 %; 3 – 10 %, 4 – 2 %; 5 – 5 %

5 %

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4.

4 –

5 %

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		(-402)	, /	, /	-402, %
.	7,3	6,7	9,07	1,02	86
.	7,8	6,7	18,50	5,90	92
.	7,0	6,1	12,70	9,60	87
-	6,1	5,8	4,20	1,07	94

5 % -

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5 %

-402.

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-402 5 %.
1,5