

Окисление P₄ кислородом в спиртах в присутствии I₂ и NaNO₂

Состав раствора, моль/л							T, °C	[I ₂]	[NaNO ₂]	Q	Степень окисления NaNO ₂ в NaNO ₃ , %	Выход (RO) ₃ PO, %
[P ₄] × 10 ²	[NaNO ₂] × 10	[ROH]	[PhMe]	[Py] ([HOAc])	[I ₂] × 10 ([NaI])	[O ₂] × 10 ³		[P ₄]	[P ₄]	[P ₄]		
R = Bu												
1.8	7.0	8.7	1.9	0	0	0.8	60	0	38.9	0	0	2.5
1.8	7.0	8.7	1.9	»	(0.8)	0.8	60	»	38.9	3.3	»	14.8
1.8	7.0	7.6	1.9	1.2	0	0.8	60	»	38.9	0	»	6.7
1.8	7.0	7.6	1.9	1.2	(0.8)	0.8	60	»	38.9	3.3	»	12.9
2.5	0	8.7	1.9	0	2.4	1.9	20	9.6	0	0	»	12.0
2.5	0	7.6	1.9	1.2	1.4	0.8	60	5.6	0	0	»	34.0
2.5	3.0	8.7	1.9	0	4.0	1.9	20	16.0	12.0	5.0	»	91.0
2.1	2.5	7.2	3.2	»	3.2	0.8	60	15.2	11.9	4.7	»	91.0
0.7	2.0	4.2	5.4	0.9	0.8	0.8	60	11.4	28.6	5.0	3.5	100.0
0.6	2.0	3.8	5.9	0.8	0.7	0.8	60	11.7	33.3	5.0	3.5	96.0
1.8	3.0	6.5	3.8	0	1.0	1.4	40	5.5	16.7	4.1	0	77.2
2.0	1.5	6.5	3.8	»	1.0	1.4	40	5.0	7.5	3.6	»	67.7
2.0	0.75	6.5	3.8	»	1.0	1.4	40	5.0	3.8	3.4	»	73.6
2.0	0.3	6.5	3.8	»	1.0	1.4	40	5.0	1.5	3.2	»	33.8
2.0	0	6.5	3.8	»	1.0	1.4	40	5.0	0	0	»	28.6
2.0	0.75	6.5	3.8	»	0.6	1.4	40	3.0	3.8	3.0	»	60.0
2.0	0.75	6.5	3.8	»	1.4	1.4	40	7.0	3.8	3.9	»	82.5
2.0	0.75	6.5	3.8	0	2.0	1.4	40	10.0	3.8	4.2	0	76.2
1.8	3.0	6.5	3.8	1.2	1.0	1.4	40	5.5	16.7	3.7	»	66.8
1.8	3.0	6.5	3.8	2.4	1.0	1.4	40	5.5	16.7	3.9	0	71.6
1.4	1.5	8.2	1.9	0.6	1.0	1.4	40	7.1	10.7	4.8	»	86.6
2.8	1.5	8.2	1.9	0.6	1.0	1.4	40	3.6	5.3	3.6	»	57.0
1.4	0.75	6.4	3.8	(0.2)	0.6	0.8	60	4.3	5.3	5.0	»	62.7
1.4	1.5	6.3	3.9	(0.35)	1.0	0.8	60	7.1	10.7	5.0	1.5	78.4
2.0	0.75	6.5	3.6	(0.5)	0.6	1.4	40	3.0	3.8	5.0	1.3	91.2
2.0	0.75	6.5	2.8	(1.7)	0.6	1.4	40	3.0	3.8	5.0	10.7	80.0
2.0	0.75	6.5	1.9	(3.5)	0.6	1.4	40	3.0	3.8	5.0	13.3	63.4
1.8	0.3	6.5	3.8	0	1.0	4.2	40	5.5	1.7	3.8	0	82.0
1.8	0.3	6.5	3.8	»	1.0	7.0	40	5.5	1.7	4.1	»	86.1
1.8	3.0	8.7	1.9	»	2.0	2.1	15	11.1	16.7	5.0	1.2	71.8
1.8	3.0	8.7	1.9	»	2.0	1.8	25	11.1	16.7	5.0	3.9	74.6
1.8	3.0	8.7	1.9	»	2.0	1.4	40	11.1	16.7	5.0	2.7	73.8
1.8	3.0	8.7	1.9	»	2.0	0.8	60	11.1	16.7	5.0	6.0	77.8
2.8	0.75	8.7	1.9	»	1.0	0.8	60	3.6	2.7	3.3	0	73.5
2.8	1.5	8.7	1.9	»	1.0	0.8	60	3.6	5.3	3.7	»	77.3
0.9	3.0	5.4	3.8	1.2	1.0	0.8	60	11.1	33.3	5.0	1.4	88.0
1.8	3.0	5.4	3.8	1.2	1.0	0.8	60	5.5	16.7	5.0	0.3	78.8
2.7	3.0	5.4	3.8	1.2	1.0	0.8	60	3.7	11.1	5.0	0	74.6
R = Et												
2.0	0.75	10.3	3.8	0	0.6	1.2	60	3.0	3.8	2.9	0	86.4
2.0	3.0	13.7	1.9	»	1.0	1.6	40	5.0	15.0	5.0	16.7	98.4
1.7	2.6	11.9	3.3	»	0.9	1.6	40	5.3	15.3	5.0	13.1	96.7
1.5	2.3	10.5	4.3	»	0.8	1.6	40	5.3	15.3	5.0	10.1	87.7
1.4	2.1	9.4	5.2	»	0.7	1.6	40	5.0	15.0	5.0	1.4	84.3