

« », ( )

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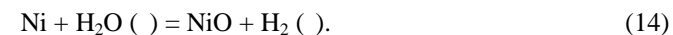
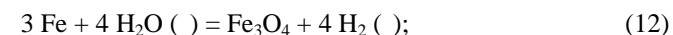
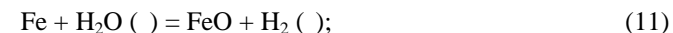
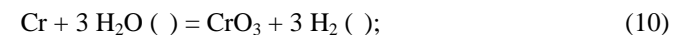
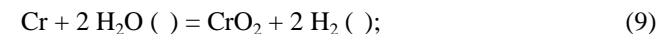
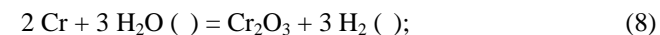
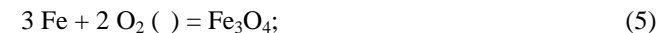
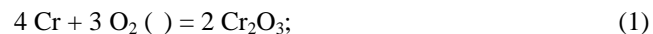
The results of thermodynamic calculations of possible formation reactions for volatile metal compounds (Ni, Fe, Cr) of non-rusting grate are presented in the paper. The possibility of formation of given oxides is proved. Thermodynamic analysis of all possible formation reactions for binary oxides compounds of adsorbent components has been carried out and negative influence of mentioned interactions has been revealed. From the results obtained the recommendations as to method of adsorbent installation in reactor are given.

[1 – 2].

[3 - 5]

12 18 10 .

(1 – 7) (8 – 14).



. 1,

(10, 14).

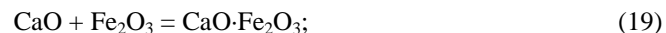
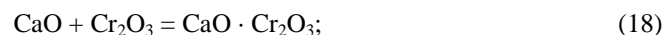
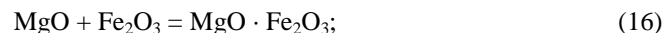
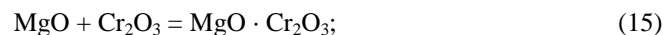
: Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>

NiO,  
(1, 4, 7).

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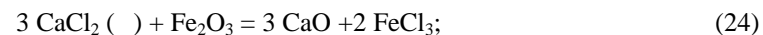
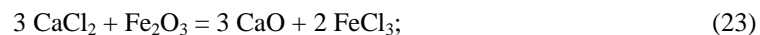
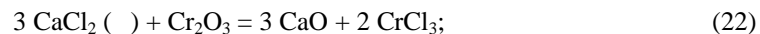
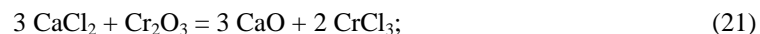
$\Delta G_T^0$  ( )

	298	400	600	800	1000	1200
(1)	- 2117,93	- 2062,68	- 1956,33	- 1851,80	- 1748,33	- 1654,47
(2)	- 525,66	- 507,37	- 472,04	- 437,35	- 403,18	- 369,42
(3)	- 1026,89	- 974,51	- 872,94	- 773,05	- 674,66	- 577,62
(4)	- 244,30	- 234,57	- 210,00	- 184,76	- 159,63	- 133,98
(5)	- 1014,17	- 970,68	- 869,08	- 767,38	- 669,22	- 573,54
(6)	- 1480,69	- 1413,75	- 1260,53	- 1106,04	- 954,15	- 802,88
(7)	- 214,84	- 205,36	- 187,32	- 169,96	- 153,11	- 136,65
(8)	- 373,18	- 359,54	- 335,88	- 314,98	- 295,86	- 277,89
(9)	- 68,47	- 59,50	- 43,85	- 30,08	- 17,64	- 6,20
(10)	172,34	184,54	205,82	224,39	240,98	256,03
(11)	- 15,71	- 10,64	4,09	18,88	33,14	47,63
(12)	- 99,78	- 74,95	- 12,70	47,17	101,86	152,91
(13)	- 54,56	- 35,08	12,02	57,90	101,23	143,40
(14)	13,76	18,57	26,77	33,68	39,66	44,97

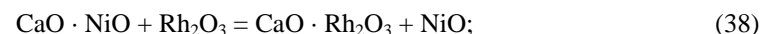
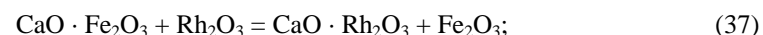
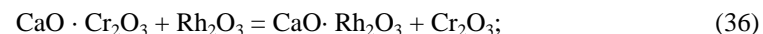
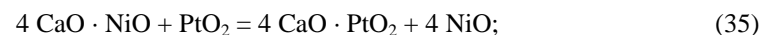
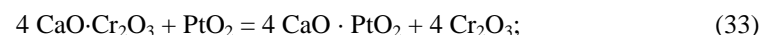
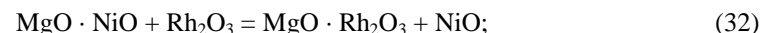
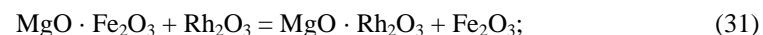
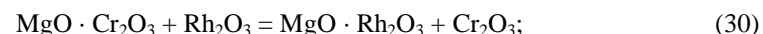
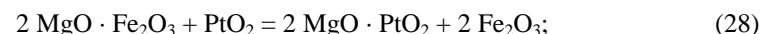
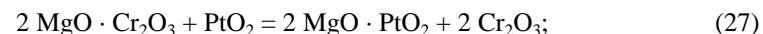


$\Delta G_T^0$  ( )

	298	400	600	800	1000	1200
(15)	- 98,07	- 99,12	- 101,19	- 103,25	- 105,31	- 107,37
(16)	- 214,95	- 217,01	- 220,80	- 223,61	- 226,09	- 229,02
(17)	- 48,95	- 48,84	- 45,11	- 38,00	- 28,38	- 16,76
(18)	- 40,19	- 39,77	- 38,40	- 36,81	- 35,17	- 33,56
(19)	- 39,48	- 40,21	- 41,65	- 43,08	- 44,51	- 45,94
(20)	- 21,04	- 21,46	- 22,28	- 23,10	- 23,92	- 24,74
(21)	523,84	528,67	538,52	548,23	557,34	565,59
(22)	463,55	478,55	516,86	562,08	611,05	661,94
(23)	492,41	488,54	476,81	462,22	446,48	430,61
(24)	432,12	432,75	433,88	435,09	436,37	437,72
(25)	102,68	103,83	106,38	109,24	112,33	115,61
(26)	82,58	87,12	99,16	113,86	130,24	147,72



( . 3):



. 3, (II),

(32, 38, 41).

$\Delta G_T^0$  ( )

	298	400	600	800	1000	1200
(27)	40,80	39,48	35,84	31,76	27,59	23,45
(28)	39,38	40,38	42,34	44,30	46,26	48,22
(29)	2,50	2,87	3,61	4,34	5,08	5,82
(30)	11,36	10,44	8,09	5,53	2,91	0,32
(31)	10,66	10,89	11,34	11,80	12,25	12,70
(32)	- 7,79	- 7,87	- 8,02	- 8,18	- 8,34	- 8,50
(33)	243,51	245,76	250,17	254,59	259,01	263,43
(34)	711,00	717,30	728,62	736,04	738,11	734,03
(35)	47,00	44,63	25,85	- 6,42	- 48,72	- 99,01
(36)	41,38	41,16	40,72	40,29	39,85	39,41
(37)	158,25	159,04	160,33	161,65	162,63	163,06
(38)	- 7,75	- 9,12	- 15,36	- 24,97	- 37,08	- 51,20
(39)	41,57	41,26	40,64	40,03	39,41	38,79
(40)	158,45	159,14	160,25	161,65	162,63	163,06
(41)	- 7,75	- 9,12	- 15,36	- 24,97	- 37,08	- 51,20

1. «...» 1970, . 76 – 77. 2. «...» 1977, . 73. 3. «...» 2004. - 14 – . 101-106. 4. «...» 2005. - . 5. «...» 2004. - . 38-39. 15.04.06

«...»

The results of researches of thermodynamically stable barium silicates are given. The base of the thermodynamic data (enthalpies, entropies and equation factors of the thermal capacity) which are necessary for research of the multicomponent systems with barium silicates in their composition is created.

298 ;  $S_{298}^0 -$  ;  $G_{298}^0 -$  ;  $B_5Si_8O_{21}$ ;  $B_3Si_5O_{13}$ ;  $Ba_2SiO_4$ ;  $BaSiO_3$ ;  $Ba_2Si_3O_8$ ;  $BaSi_2O_5$ ;  $B_5Si_8O_{21}$ ;  $B_3Si_5O_{13}$ . [1, 2].

$Ba_5Si_8O_{21}$ ;  $Ba_3Si_5O_{13}$ ;