INCREASING THE EFFICIENCY OF PYROLYSIS

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. 1 [2].

1

RCH_2-H	1*
$\begin{array}{c} CH_3 \\ \diagup \\ CH-H \\ \diagdown \\ R \end{array}$	1
$\begin{array}{c} R_1 \\ \diagup \\ CH-H \\ \diagdown \\ R_2 \end{array} (R_1, R_2 > CH_3)$	1
$\begin{array}{c} R_1 \\ \diagup \\ CH-H \\ \diagdown \\ R_2 \\ \diagdown \\ R_3 \end{array} (R_1, R_2, R_3 > CH_3)$	4
1
1
2

, - , 4 .

60 %

3 5 75

. 2 [2].

. 1 2

6/12, 50 %.

3

$$\frac{6 \cdot 1}{6 \cdot 1 + 4 \cdot 4,5 + 2 \cdot 7}, \quad 16 \%$$

2

$RCH_2 - H$	1*
$\begin{array}{c} CH_3 \\ \searrow \\ CH - H \\ \nearrow \\ R \end{array}$	4,5
$\begin{array}{c} R_1 \\ \searrow \\ CH - H (R_1, R_2 > CH_3) \\ \nearrow \\ R_2 \end{array}$	7
$\begin{array}{c} R_1 \\ \searrow \\ CH - H (R_1, R_2, R_3 > CH_3) \\ \nearrow \\ R_2 \\ \nearrow \\ R_3 \end{array}$	14
4,5
4,5
8

[4]

2 %

(8)

продукты конденсации

(9)

28 %

2 %

1 : 1

85–150 °

85–150 ° (= 810 ° , - ;)

1 — ; 2 — ; 3 — ; 4 — ; 5 — ; 5+, - ; 11–51 — 2 % .

(1) (2), (3) - (2).

[5].

$$W \quad (11)$$

$$W = k_1 \cdot [\dot{R}] \cdot [M], \quad (11)$$

k_1 — , $\dot{R}$ — ,

$$v = k_2 \cdot [\dot{R}]^2, \quad (12)$$

v — , k_2 —

$$W = k_1 \cdot \sqrt{\frac{v}{k_2}} \cdot [M], \quad (13)$$

0,5.
-
-
55 , [3].
(,) (. 3).

3

, %			, %
	, ,	, ,	
1	2	3	4
- -1			
0	823	2,00	6,5
0,5	823	2,00	20,1
0	923	0,10	11,0
0,5	923	0,10	21,4
-			
0	923	0,06	5,2
0,5	923	0,06	56,2
0	963	0,02	4,5
0,5	963	0,02	46,5
0	933	3,90	20,5
0,5	893	0,55	20,5
0	973	0,19	7,0
0,5	973	0,19	53,5
0	903	0,38	9,0
1,5	903	0,38	45,0
0	953	0,09	9,5
1,5	953	0,09	55,6
0	923	0,26	20,5
1,5	898	0,16	20,5
0	973	0,04	2,3
1,5	973	0,04	30,0

. 4.
(14)

$$10^{-11} \cdot e^{\frac{181780}{RT}} \frac{3}{}, \quad (15)$$

	/ ,	, %	/ ,
- -1	244±7	0.5	163±7
-	258±10	0.5	154±13
	224±6	0.5	130±10
	215±16.5	1.5	163±9
	151±10	1.5	92±8

$$10^{-11} \cdot e^{\frac{113000}{RT}} \frac{3}{\text{---}} [6].$$

. 5

(16)

1 . %

(14) (15).

1 000 .

1000

(17)

, ,	, -3, -1					
	(16)	(14)	(15)	(16)	(14)	(15)
833	$10^{11.775}$	$10^{13.587}$	$10^{14.906}$	1*	65	1350
900	$10^{13.459}$	$10^{14.452}$	$10^{15.445}$	1*	10	95
1000	$10^{15.479}$	$10^{15.489}$	$10^{16.088}$	1*	1,0	1,2
1053	$10^{16.405}$	$10^{15.965}$	$10^{16.384}$	1*	0,4	1,0

*

800 ° . 7

(60 .).

80 %

0,5 %

21,2 %

820 °C, 0.1 s, 70–100 °C, 1 s, 1:3,66 /

%,	, %	
	C ₂ H ₄	C ₅₊
0,0	24,7±0,7	22,3±0,6
0,3	27,3±0,2	19,1±0,6
0,5	27,8±0,3	17,3±0,5

800 °C, 1:3,66 /

%,	, %	, %		
		2 4	3 6	4 6
0	0,5	33,0	17,3	5,0
0,3	0,09	35,5	18,4	6,5

2 %

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