

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. 7  
C08J 5/18

(11)  
(43)

2002 - 0060727  
2002 07 18

(21) 10 - 2002 - 7005688  
(22) 2002 05 02  
      2002 05 02  
(86) PCT/EP2000/10399  
(86) 2000 10 23

(87) WO 2001/32778  
(87) 2001 05 10

- 51368

2040 420 507

(72)

,		
41539	41	
,		
- 9100		52
,		
- 9170	-	9
,		
- 9100	-	59
,		
- 2990		30

(74)

(54)

oundary process)

, 2 (hollow chamber)  
가 .

(phase b)

EP - A - 264 - 885

m

JP - A - 07 19 67 83

2 pp

,  
,  
가  
Fe, Cr, Ni, Zn, Ca,  
Mg, Al

, a) c),  
.

a) Fe, Cr, Ni, Zn, Ca, Mg, Al

b)

c)

, 2 ppm , , 1 ppm , , 0.5 ppm  
0.2 ppm

Na  
OH , , 1 ppm , , 0.5 ppm , , 0.1 ppm , , 100 % NaOH , , 0.3 ppm  
1 ppm , , 0.5 ppm , , 0.1 ppm , , 20 55 % , , 30 50  
%

(membrane process)

가

Fe, Cr, Ni, Zn, Ca, Mg, Al

( )

( )

가

2  $\mu$  S/cm (DIN 38404 C 8)

, ( ) , , 0.02 mg/kg (VGB 3.3.1.1)

SiO<sub>2</sub>

1 ppm , , 100 ppb

가

1 ,

2 ,  
가

3

a) e)

a) Fe, Cr, Ni, Zn, Ca, Mg, Al

b)

c) , 가 1

,

d) ,

e)

, d) ( ) e) ( )

2 , 3

, 1 , 2 , 3

, d) 2

e) , 가

가

, 가 (freezing out method)

0.01 , 5  $\mu\text{m}$ , 0.02 1.5  $\mu\text{m}$ , 0.05 1.0  $\mu\text{m}$   
 (Pall GmbH, - 63363 ) (K  
 rebsboege GmbH, - 42477 ; SIKA - R CU1AS ) 가

, 가

HCl H<sub>3</sub>PO<sub>4</sub> 0.5 1.0 %, 가 5  
 HCl H<sub>3</sub>PO<sub>4</sub>

가 . , 가

- A),  
- A, 4,4 - ( - ) - ( M), 1,1 - - (4 - ) - 3,3,  
5 - . - A  
1,1 - - (4 - ) - 3,3,5 - .

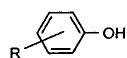
, , , 3,3' - 4,4' -

3 , N - . 1 , , , p - tert - , 4 - (1,1,3,  
N -  
3 - )  
(branching agent)

, , 1 1.0  
20.0 % 가

, p - tert - , p - , p - n - , p - - , p - n - , p - - ,  
p - . 2.4 - . p - . 2.4.6 - .

|



R , tert -

C<sub>8</sub> - ( ) C<sub>9</sub> -

p - tert -

1      0.1      5    %

가

,

,

3

가

3

OH

, 4,6 - - 2,4,6 - - (4 - ) - - 2 - , 4,6 - - 2,4,6 -  
 - (4 - ) - , 1,3,5 - - (4 - ) - , 1,1,1 - - (4 - ) - , 2,4 - - (4 -  
 - (4 - ) - , 2,2 - - [4,4 - - (4 - ) - ] - , 2,4 - - (4 -  
 2,4 - - (4 - ) - , 2,6 - - (2 - - 5' - ) - 4 - , 2 - (4 - ) - 2 - (4 -  
 - (4 - ) - , - (4 - (4 - ) - ) - ) - , 1,4 - - (4',4" -  
 (3 - - 4 - ) - ) - 2,4 - , 3,3 - -  
 (3 - - 4 - ) - 2 - - 2,3 -

1      0.05      2    %

가

,      80    %      ,      20    50    % 가

12,000      400,000,  
 0,000      M<sub>w</sub> ( 25      100 ml  
 )      23,000      80,000,      24,000      4  
 0.5 g

2

150       $\text{m}^2$

200  $\mu\text{m}$

, 250

2

가

5 % , 0.4 %

0.

1

, BPA (BPA

)  
가 ( 1 ),  
6.5 %

가

, 1.0  $\mu\text{nom}$

(0.6  $\mu\text{a}$  )

가 , 0.6 %

가 5

0.2  $\mu\text{a}$

31,000

, 55      가 , 0.6  $\mu\text{a}$   
- 2,2 - - (4 - ) - - -  
 $M_w$       가 .

### [ 1 ]

	1	2	3
% NaOH	50	50	32
Fe (ppm)	0.7	0.46	0.02
Ca (ppm)	2.0	0.4	< 0.1
Mg (ppm)	0.5	0.2	< 0.1
Ni (ppm)	0.2	0.2	< 0.01
Cr (ppm)	0.4	0.25	< 0.01
Zn (ppm)	0.1	0.05	0.06
(ppm)	3.9	1.56	< 0.3
100% NaOH	1	2	3
Fe (ppm)	1.4	0.9	0.06
Ca (ppm)	4.0	0.8	< 0.3
Mg (ppm)	1.0	0.4	< 0.3
Ni (ppm)	0.4	0.4	< 0.03
Cr (ppm)	0.8	0.5	< 0.03
Zn (ppm)	0.2	0.1	0.19
(ppm)	7.8	3.0	< 0.9

[ 2]

	1	2	3
0.6 $\mu\text{a}$	12 h	10 d	30 d
1.0 $\mu\text{a}$	24 h	30 d	> 60 d
1 = 0.6 $\mu\text{a}$ 2 = 0.2 $\mu\text{a}$	12 h	3 d	21 d

1      3

200  $\mu\text{m}$       60 mm      . He/Ne      (0.1 mm      "      "      가 )가 5000 Hz  
 ,      5 m/s  
 (      0.10 mm      )  
 1 kg      ,       $\text{m}^2$       가

[ 3]

	가		
	PC		
$\text{m}^2$	1	2	3
0.10      0.30 mm	148	93	35
> 0.30 mm	232	132	41
	380	225	76

ASTM D1003

가 ,      3  
 4 mm) 0.38 %

(

가 ,      /

(57)

1.

200  $\mu\text{m}$        $\text{m}^2$       250

2.

200  $\mu\text{m}$        $\text{m}^2$       150

3.

1      2

4.

1      2

5.

200  $\mu\text{m}$        $\text{m}^2$       250

6.

5 ,  $\gamma \geq 0.5 \%$

7.

200  $\mu\text{m}$        $\text{m}^2$       250 , 0.5 %

8.

200  $\mu\text{m}$        $\text{m}^2$       250 , 0.5 %