

:

(54)

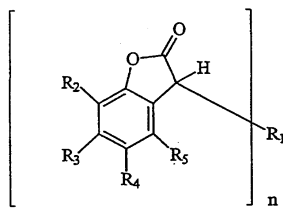
가

|

1

가

< >



, n 1, R₁
C₁₋₄ -
C₁₋₂₅ -

, R₂, R₃, R₄, R₅, n 2, R₁,

가

가

() ,
() - 2 - 1 0.01
1.0 %,
() 0.01 1.0 % (%) .

가 가 가 .
4,624,972 ; 5,187,211 , 4,804,692 , 4,963,598 , 4,874,
802 , 5,006,572 , 5,187,208 , 5,274,009 5,214,078 가 .

4,325,863
(2)
4,338,244 . , SAN 가
3 - -3H- -2- 3
5,175,312 5,607,624 가 . 09/2
68,115 09/270,860 .

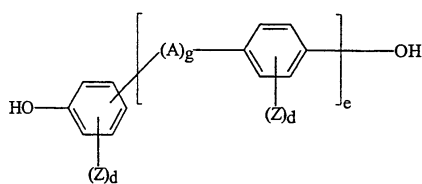
WO98/58996 (PCT/EP98/03425)

가
0.01 0.75 % 1 , 0.01 1.0 % ,
0.01 0.75 % .

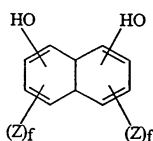
ASTM D - 1238 10,000 200,000, 15,000 80,000 , 300
1 95 g/10 , 2 15 g/10 .
2
(2,063,050 ; 2,063,052 ; 1,570,703 ; 2,211,956 ; 2,
211,957 2,248,817 ; 1,561,518 ; [H.Schnell, " Chemistry and Physics of Po
lycarbonates" , Interscience Publishers, New York, New York, 1964]).

1 2 .

1



2



, A 1 8 , 2 8 , 5 15
 , 5 15 , , , -SO- -SO₂



e g 0 1 ;

Z F, Cl, Br C₁ - C₄ , Z ,

d 0 4 ;

f 0 3 .

- () - , - () - , - () - , - () - ,
 - () - , - () - , - () - ,

5,227,458 ; 5,105,004 ; 5,126,428 ; 5,109,076 ; 5,104,723 ; 5,086,157 ; 3,028,356
 ; 2,999,835 ; 3,148,172 ; 2,991,273 ; 3,271,367 2,999,846 .

2,2- - (4-) - (A), 2,4- - (4-)
 -2- , 1,1- - (4-) - , , ' - - (4-) - p - ,
 2,2- - (3- -4-) - , 2,2- - (3- -4-) - , - (3,5-
 -4-) - , 2,2- - (3,5- -4-) - , - (3,5- -4-
) - , - (3,5- -4-) - , - (3,5- -4-) - ,

, 2,4 - (3,5 - 4 -) - , , ' - (3,5 - 4 -) - p - , 4,4' - 1,1 - (4 -) - 3,3,5 -

) - , 1,1 - (4 - 2,2 - (4 -) - , 2,2 - (3,5 - 4 -) - 3,3,5 -

가 2,2 - (4 -) - (A) .

1

가

3,036,036

4,210,741

0.05 2.0 %

885,442 1,079,821 , 1,570,533 ; 2,116,974 2,113,374 ;
 3,544,514
 ; 4,6 - 2,4,6 - (4 -) - ; 1,3,5 - -
 (4 -) - ; 1,1,1 - (4 -) - ; - (4 -) - ; 2,2 - - [
 4,4 - (4,4' -)] - ; 2,4 - (4 - 1 -) - ; 2,6 -
 - (2' - 5' -) - 4 - ; 2,4 - ; 2 - (4 -) - 2 - (2,4 -
) - 1,4 - (4,4' -) - 2,4 -
 , , 3,3 - (4 -) - 2 - 2,3 -

3,008 2,991,273 3,028,365 ; 2,999,846 ; 3,15

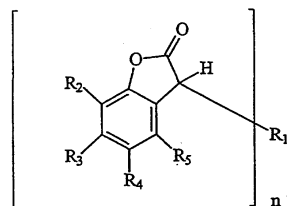
3,912,688

3	16, 7.5	13.0	3.5	6.5 g/10	ASTM D - 1238	(MFR)	16.5	24, 1
			MFR	14 17 g/10	(Makrolon) 2400,	2600, 2800	3100	
						2500		

31 ; 4,369,303 3,030,331 ; 3,169,121 ; 3,395,119 ; 3,729,447 ; 4,255,556 ; 4,260,7
 4,714,746

1

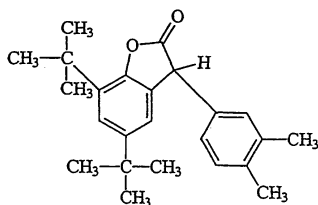
- 2 -



, n 1, R₁
C₁₋₄ -
C₁₋₂₅ -

, R₂, R₃, R₄, R₅, n 2, R₁

5,7 - tert - 3 - (3,4 -) - 3H - - 2 -



2 5,607,624

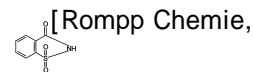
Irganox() HP136

4,325,863, 5,175,31

6, S.3952]

[Ullman, 4, 22, S357]

2,667,503



(")가
; N - i/n - ; N - / / /tert - ; N - / - - ; N -
-, N - - N - 가 .

N - ; N -
- ; N -

100 ppm

가 .

, 가 , UV , 가 , , 가 , , 가 ,

A 가 1 30,000

1 () 2

1 - 5,7 - - tert - - 3 - (3,4 - -) - 3H - - 2 - ,



YI ASTM E313 (YI₀ ()), (YI) 가
Mrad - 2) (Co bomb; 3 Mrad - 1; 5
YI₀ YI₁₀ YI , YIw (YI₁₀)

[1]

3 Mrad	1	2	3	4	5	6
(%)	100	99.5	99.5	99.5	99.5	99.25
(%)	0	0.5	0	0.25	0.5	0.25
(%)	0	0	0.5	0.25	0.25	0.5
YI ₀	4.2	4.2	3.6	4.6	6.0	7.4
YI ₁₀	28.2	22.8	19.6	20.0	20.2	15.5
YI	24.00	18.6	16.0	15.4	14.2	8.1

[2]

5 Mrad	1	2	3	4	5	6
(%)	100	99.5	99.5	99.5	99.5	99.25
(%)	0	0.5	0	0.25	0.5	0.25
(%)	0	0	0.5	0.25	0.25	0.5
YI ₀	4.2	4.2	3.6	4.6	6.0	7.4
YI ₁₀	51.9	35.8	36.0	35.0	31.8	30.0
YI	47.7	31.6	32.4	30.6	25.8	22.6

YI 가

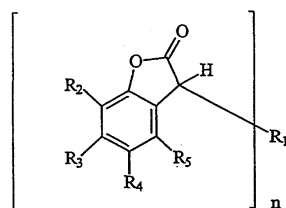
가

(57)

1.

0.01 ~ 1 % () 가 0.01 ~ 1.0 % ()

< >



, n 1, R₁ C₁₋₄ , n 2, R₁, R₂, R₃, R₄, R₅, C₁₋₂₅

2.

1 () 5,7- -tert - -3 - (3,4 -) - 3H - -2 - 가

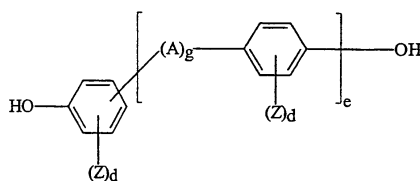
3.

1 , 15,000 ~ 80,000 가

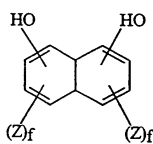
4.

1 가 1 가 2

< 1 >



< 2 >



, A 1 8 , 2 8 , 5 15
 , 5 15 ; , , , -SO- -SO₂-



e g 0 1 ;

Z F, Cl, Br C₁ - C₄ - , Z ,

d 0 4 ;

f 0 3 .

5.

1 , 가 2,2- - (4-) , 2,4- - (4-) - 2-
 , 1,1- - (4-) , , ' - - (4-) - p- , 2,2- - (
 3- - 4-) , 2,2- - (3- - 4-) , - (3,5- - 4-
) , 2,2- (3,5- - 4-) , - (3,5- - 4-) , -
 (3,5- - 4-) , - (3,5- - 4-) , - , 2,4-
 - (3,5- - 4-) , , ' - - (3,5- - 4-) - p-
 , 4,4' - 1,1- - (4-) - 3,3,5-
 가 .

6.

1 , 가 2,2- - (4-) - 가

7.

1 ,  가 .

8.

1 , N- / - N- , N- , N- i/n , N- / / /tert
- , N- / - , N- , N- 가 , N- N-

9.

1 , N- N-
가 .

10.

1 , N- N-
가 .