

(19)
(12)

(KR)
(B1)

(51) 。 Int. Cl. ⁷
C09B 69/02

(45)
(11)
(24)

2002 12 06
10 - 0343355
2002 06 24

(21) 10 - 1994 - 0013424
(22) 1994 06 15

(65) 1995 - 0000815
(43) 1995 01 03

(30) P43 19 873.2 1993 06 16 (DE)

(73) () 662

(72) 4142 88

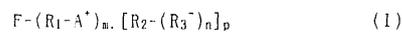
4105 48

(74)

:

(54)

(I) :



F :

R₁ 가 ;

R₂ C₈₋₂₄ , C₈₋₂₄ C₈₋₂₄ ;

R_3 -COO-, -SO₃-, -PO₃- -PO₂- ;

A⁺ ;

m 1, 2, 3 4 ;

n 1, 2 3 ;

p 1, 2, 3 4 ;

, n x p m .

(mass dyeing)

(150 300)

가 .

가

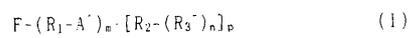
(,).

i) , () ,

ii) (150 300 ,) ,

iii) , .

(I) :



F ;

R₁ 가 ;

R₂ C₈₋₂₄ , C₈₋₂₄ C₈₋₂₄ ;

R₃ -COO-, -SO₃-, -PO₃- -PO₂- ;

A⁺ ;

m 1, 2, 3 4 ;

n 1, 2 3 ;

p 1, 2, 3 4 ;

, n × p m .

F [the Color Index, T
 hird Edition 1971 (the Color Index International 1987)] " " (Pigments), "
 " (Disperse Dyes) " " (Solvent Dyes) .

F , , - , , , , , - ,
 - , F' .

F 가 Cr, Ni, Cu,
 Co, Mn Al .

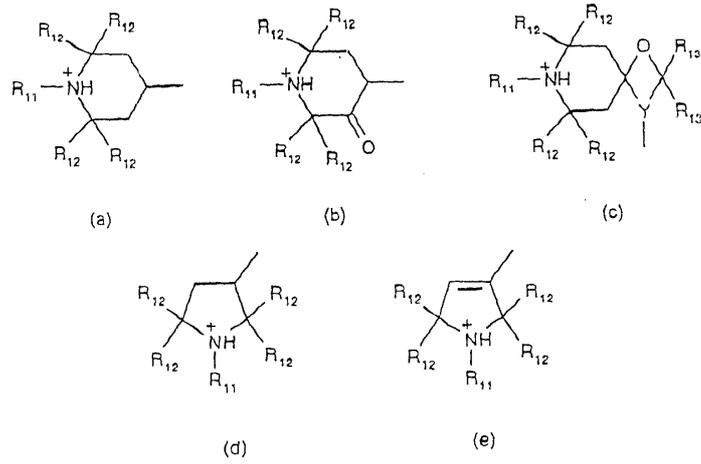
R₁ 2 가 가 , -O-, -CO-, -NR₃-, -O-CO-, -CO-O-, -SO₂-, -NR₃-CO-, -CO-N
 R₃ -, -SO₂-NR₃- -NR₃-CO-NR₃-(R₃ C₁₋₄) R₁'가 .

R₂ 1 가 R₂' . R₂'가 (,
), C₈₋₂₄ , C₈₋₂₄ , C₈₋₂₄
 , R₂' .

n 1 .

F 가 , m 1 4 . F 가 (,)
 , m 1 2 가 , F 가 , m 1 4 .

A⁺ a) e) A₁⁺ .



R₁₁ C₁₋₄ (,) ;

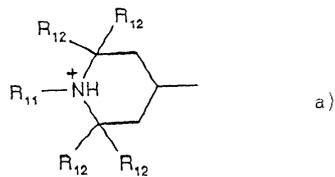
R₁₂ C₁₋₅ , ;

R₁₃ , , , ;

R₁₃ - (CH₂)₁₁ - ;

Y - N - CO - - CO - N - .

A⁺ 가 a) A⁺ 2 .



(I) ;

(II) 1 ,

(III) p

F - (R₁-A₁)_n (II)

R₂⁻ - (R₃⁻)_n (III)

A₁

가

(II)

(III)

()

(II) (III)

(I)

i)

ii)

(I)

(I)

0.0

1 5 % ()

(II) (III)

(I)

가

(I)

0.01

3

%,

0.1 1.5 %

MDPE, LLDPE LDPE)

(, HDPE,

(, UV),

가

()

가

10 70 %,

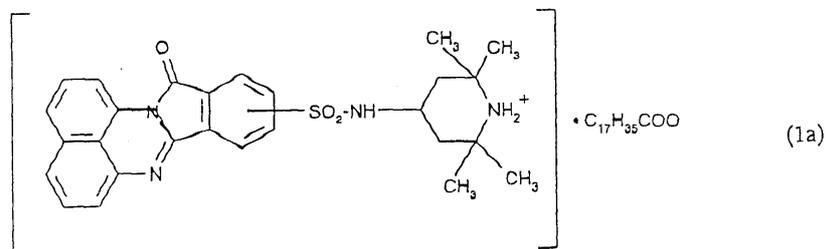
90 30 %

가 ()

%

1

1a



a) 12-H-1 600
 -12-100 54 45
 , 가 24
 가 ,
 1200 가 15 가
 / 2000
 358 가 , 24 ±

1-H-2 64.2
 -12-30
 , ,
 300 30
 500 80
 2,2,6,6-20 ± 2
 가 , 가
 21.2

b) a) 24.4 NaOH 2
 HCl 5.8 가 가
 500 200 가 , 2
 14.2 (90)
 , 30 50 2 , 100 4
 , 80
 , 가

2()

- 2 -12- 68.4 -2',2',6',6'- 2.8 50 -4'- 320 4.8 가 , 1a 12-H 55

3()

kg/cm² - 12 - - 2', 2', 6', 6' - 99.8 (" Gelimat") 0.1 1a 2 - H - 0.1 30 , 31

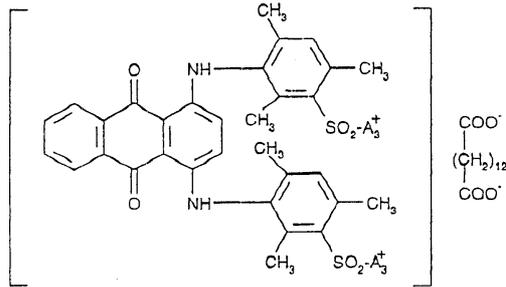
4 19

1

실시예 번호

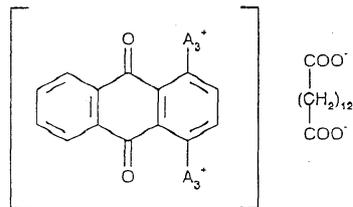
색조

4



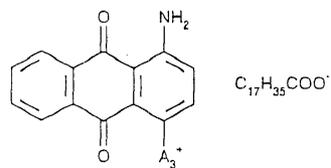
양상

5

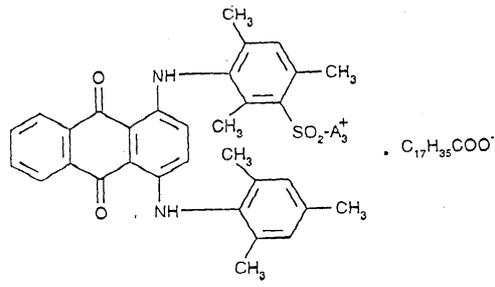


양상

6

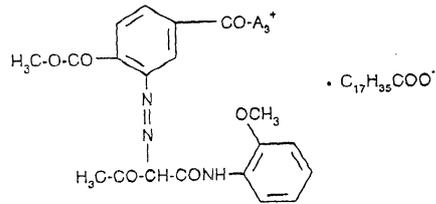


양상



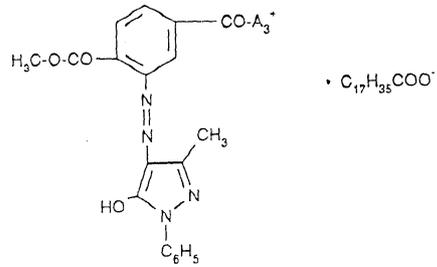
청색

8

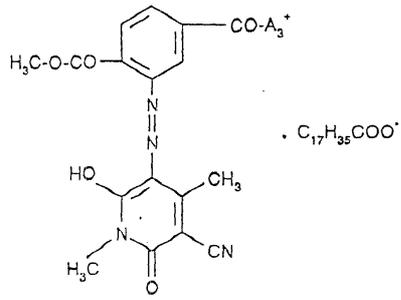


황색

9

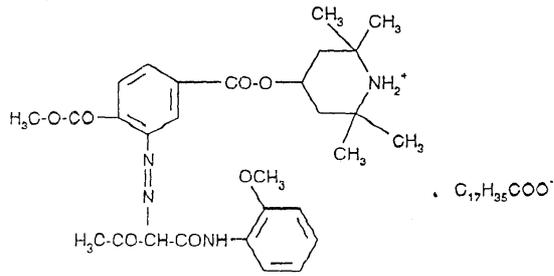


황색



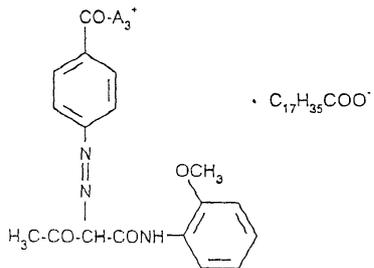
황색

11

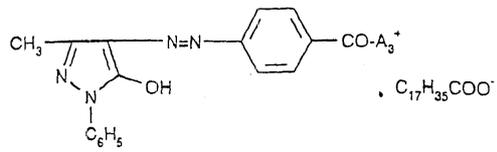


황색

12

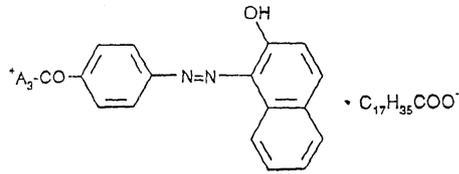


황색



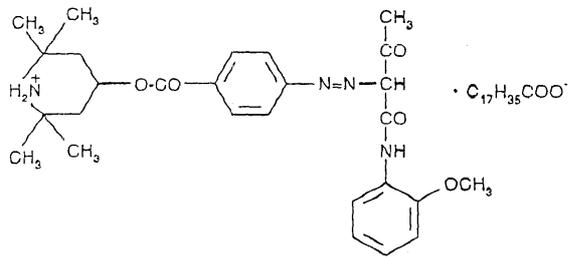
황색

14



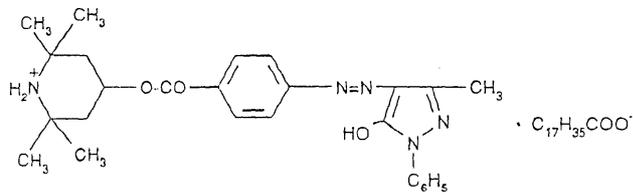
적색

15



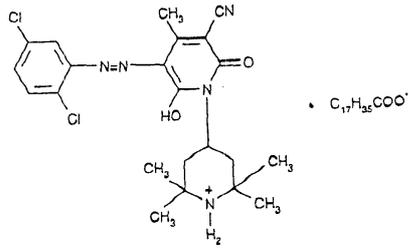
황색

16



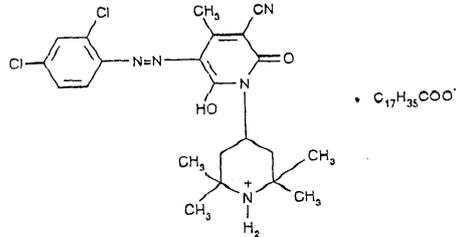
황색

17



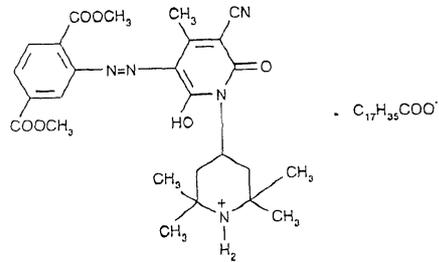
황색

18



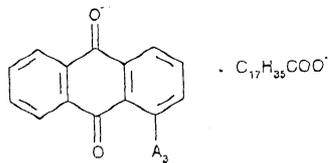
황색

19



황색

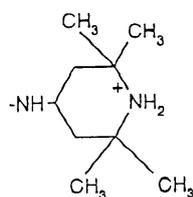
20



적색

, A₃⁺

:



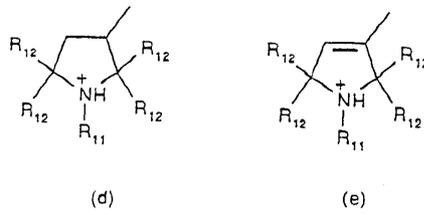
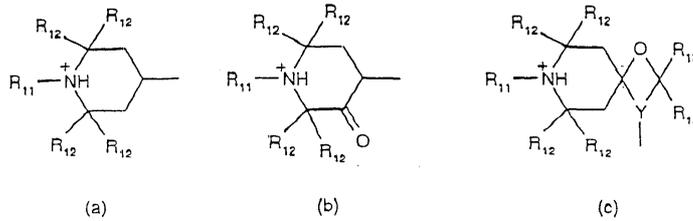
4.

1 ,
 R_2 가 , , C_{8-24} , R_2 "

5.

1 ,
 A^+ 가 a) e) A^+_1

:



R_{11} C_{1-4} ;

R_{12} C_{1-5} ;

R_{13} , , , ;

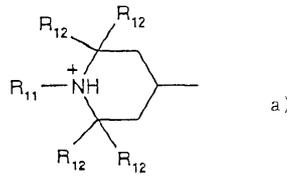
R_{13} - (CH₂)₁₁ - ;
 Y - N - CO - - CO - N - .

6.

5 ,

A⁺ 가 a) A⁺₂

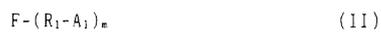
:



, R₁₁ R₁₂ 5 .

7.

(II) 1 (III) p , 1 (I)
 :



A₁ 가 ;

F, R₁, R₂, R₃, m, n p 1 .

8.

i)

ii) (I) , (I) 0.
 01 5 %() .

9.

1 (I) , .

10.

9 ,

1 (I) 0.01 5 %

.

11.

10 ,

가

.