

- ,

/

· ,
 40
 (1)
 (steam) 가 (

2) 46 () ,

· (2)

· 1 가 (1) 가

2 2

(Korea standard)

1.

가

1.1.

L(40 ,) 2002 4 E
2005 8 31

3 5

1

가

가

가

2002 6

, 2002 7 2006

, , ,) 6가 .

5

S

(220)

가

1.2.

가

1

E

, 가

가

30

- - 가 -

L 2002 4 E

가

2005 8 31

3 5

L

1

1 가

,

2

, 1

1

2003 4-5

, 2005 2

3 , 4

76-4), C.I. Solvent Red 195, 가
Zn-St(CAS No. 557-05-1).
가

57가

(Yuclair RG300U, CAS No. 9002-88-4), 2-hydroxy
-4-n-octyloxybenzophenone(CAS No. 1843-05-6), N,N-ethyle-
nebis(Kaowax EB-FF, CAS No. 32588-

MSDS



1.



2.



3. ()



4.

2-hydroxy-4-n-octyloxybenzophenone
(sensitization)

7 19 S

2002

1.3.

L

, 가

M 가

가 M

C

L

가

L 2002 4 E

, 2002 6 가

, 가
가

가

. 2002 6

2006 5

L

2002 7 19 8 19

, 2002 10 15

2003 4 7

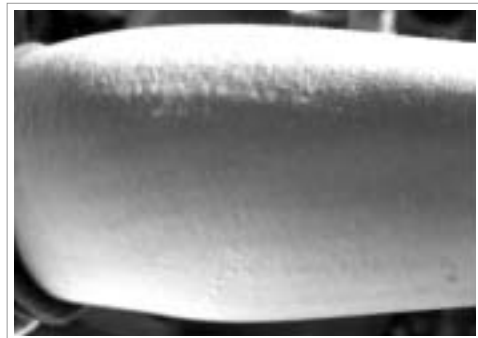
2003 5 20

2006 5

S



5. L



6. L

1.3.1. (C)
 L C .
 (patch (mast cell) (basophil)
 test) . 1
 , 가
 가 ,
 (swelling) .
 , L , ,
 가 , ,
 .

1.4. ,
 Lewis 3 ,
 . 가
 가 , ,
 , , ,
 (simple dermographism)
 (symptomatic dermogra-
 phism) .
 , , , , ,
 .¹⁾

1) , , , , , , . 2 . , 1998.

1.5. L
 L 2002 4
 2005 8 3 5 ,
 가 2 , zophenone , ben-
 가 zophenone 가
 benzophenone
 L 2-
 hydroxy-4-n-octyloxybenzophenone
 (CAS No. 1843-05-6)
 , 가
 (sensitization) .
 가
 M
 benzophenone
 (contact allergy) M 가
 (photocontact allergy)가 가
 2)-6)

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3) Berne B, Ros AM. 7 years experience of photopatch testing with sunscreen allergens in Sweden. *Contact Dermatitis* 1998;38(2):61-4.

4) Rodriquez E, Valbuena MC, Rey M, Porras de Quintana L. Causal agents of photoallergic contact dermatitis diagnosed in the national institute of dermatology of Columbia. *Photodermatol Photoimmunol Photomed* 2006;22(4):189-92.

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6) Schmidt T, Ring J, Abeck D. Photoallergic contact dermatitis due to combined UVB(4-methylbenzylidene camper/octyl methoxycinnamate) and UVA(benzophnone-3/butyl methoxydibenzoylmethane) absorber sensitization. *Dermatology* 1998;196:354-7.

L , D

benzophe- none

2.2. D

가 2

(Flap) ()

가 S

(steam) 가 (175)

300 (5) 가 (가) , (LS36)/ 가

alkoxy polyethoxy ethanol

가

2. 가

2.1. 가

S(, 46) 5 , 3 , 5 , 3 , 1 6 , 3 D () , (ZnO), 가 (stearic acid), 가 (CZ), (CLAY), 가 (DOP), (K-13, P-WAX), (P-90), 가 (S) ()

2006 1 4 가

2006 3 () (carbon black), (mineral oil),



7. (1)



8. (2)



9. (1)



10. (2)

(, zinc oxide), 가 (, stearic acid), (P-90, aromatic hydrocarbon petroleum resin), 가 (HD-003,), (Antioxidant RD, polymer of 2,2,4-trimethyl-1,2-dihydroquinoline)

2.3. S B D 가 가

2006 1 5
 (A)
 (2006 8 10) 2003 3
 2006 4
 , 7) 2005 12 14
 2006 2 27

(Korea standard)
 ,
 (hyperpig-mentation of
 basal layer with dermal melanophages)

2005 12 14
 bruise, 2006 2 27 dark
 circle-cosmetic

2.4. (Riehl's melanosis)
 (melanosis)

가
 가
 2006 1 4
 가
 가 , , 가
 가

가
 가
 (pellagra)

2006 3
 6 D

, 가
 1917

8)

, 가

7) M 2004 6 25 2005 9 7 13

8) 3 6 3 (6 22 -7 1
 , 가),

2.5. S



optical whitener(Osmundsen, 1970)⁹⁾, brilliant lake red R(Kozuka, 1979)¹⁰⁾, azo-dyes(Fujimoto, 1985)¹¹⁾, coal tar dyes(Sugai, 1977)¹²⁾, musk ambrette(Parodi, 1987)¹³⁾, aniline dyes(Pierini), geraniol oil, lemon oil(Serrano, 1989¹⁴⁾; Naganuma, 1985¹⁵⁾)

11. S (06. 12)

6 7 21

2

가

가

S

1

가

가 , 4

. D

(, , , 가 ,

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- 10) Kozuka T, Tashiro M, Sano S, Fujimoto K, Nakamura Y, Hashimoto S, Nakaminami G. Brilliant Lake Red R as a cause of pigmented contact dermatitis. Contact Dermatitis 1979;5(5):297-304.
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, 가 ,

aniline

가

S

(2006 6)

(2006 1)

1-3

가

S

()

가

, ,

,

2