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LIQUID FACE ROUGE

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This invention relates to a new and useful face rouge composition consisting essentially in its coloring components of certain combinations of dyes described hereinafter.

Face rouges heretofore produced have been solid materials consisting of finely divided relatively insoluble coloring materials intimately mixed with relatively large quantities of finely divided inert solid material of neutral shade. They have been applied in powdered form or compressed into a soft chalky cake and distributed on the skin by alternatively applying a cloth pad to the cake and to the face. These materials have obvious disadvantages in use: they are easily brushed from the skin and either water or perspiration cause a rapid deterioration of a coating of these materials on the skin and reduce it to an uneven, frequently streaked or mottled surface of unpleasant appearance. These disadvantages have been recognized but not remedied and the smooth surface and color tone desired by users of these materials can be maintained only by frequent application of the solid rouge to renew the surface.

I have found that these disadvantages of a solid rouge may be substantially completely overcome by compounding and applying a liquid rouge consisting essentially of an aqueous solution of certain combinations of dyes. This rouge is applied in liquid phase and upon evaporation of the solvent, predominantly water, leaves a thin film of the dyes on the surface of the skin. This film adheres strongly to the skin and is not disturbed by rubbing or brushing. Further, though the dyes of my composition are water soluble the dye film deposited on the skin surface upon evaporation of the solvent component of the liquid rouge is not disturbed or removed by perspiration nor does the flow of water over the skin surface appreciably affect the film. On the other hand the degree of fastness of the dye film is such that it is readily removed by gentle washing with soap and water. A single application of my liquid rouge lasts through an entire day or evening without deterioration in appearance even under extreme conditions of temperature and humidity. This degree of permanence in the rouge film is highly desirable since a liquid rouge requires a reasonable degree of care and reasonable physical facilities for its application and cannot be casually applied by dabbing with a pad or puff after the manner of solid rouges.

The liquid rouge of my invention consists essentially of an aqueous solution of two color components. The first component is a coal-tar dye selected from the group consisting of 1-Xylylazo-2-naphthol also known as "Oil Red XO," the disodium salt of 9-o-carboxyphenyl-6-hydroxy-2,4,5,7-tetraiodo-3-isoxanthone also known as erythrosine, the trisodium salt of 1-(4-sulfo-1-

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naphthylazo) - 2 - naphthol-3, 6-disulfonic acid also known as amaranth, the disodium salt of 2 - (5-sulfo-2, 4-xylylazo) -1-naphthol-4-sulfonic acid also known as "Ponceau SX," and the disodium salt of 1-pseudocumylazo-2-naphthol-3, 6-disulfonic acid also known as "Ponceau 3R." The second color component of my composition is disodium-2,7-dibromo - 4 - hydroxymercuri-fluorescein also known as "Mercurochrome." The "Mercurochrome" is present in the liquid rouge at a concentration in the range 0.003 to 0.2 percent by weight and the coal-tar dye is present in amounts from ⅓ to 3 times the amount of "Mercurochrome." In addition to the color constituents of the rouge a small amount of perfume or scent sufficient to impart a definite and pleasant aroma is desirably added. Commercially available perfumes or colognes may be employed for this purpose. While water may be used as the solvent for the dyes it is preferred to employ water alcohol mixtures containing a major proportion of water and a minor proportion of alcohol. The alcohol lowers the surface tension of the liquid rouge. Five to ten percent of ethyl alcohol is ordinarily a suitable alcohol content. The inclusion of alcohol facilitates the application of the liquid rouge so as to obtain a coating presenting a gradual color transition from the unrouged portion of the skin to the most heavily rouged portion.

The following examples are illustrative of the compositions of my invention.

Example 1

Disodium - 2,7-dibromo-4-hydroxymercuri-fluorescein	gram	.02
Amaranth	do	.035
Orange blossom scent	cc	4
Distilled water	cc	480

Example 2

Disodium - 2,7-dibromo-4-hydroxymercuri-fluorescein	gram	.045
"Ponceau 3R"	do	.035
Blossom scent	cc	0.5
Distilled water	cc	29

Example 3

Disodium - 2,7-dibromo-4-hydroxymercuri-fluorescein	gram	0.03
"Oil Red XO"	do	0.03
Gardenia scent	cc	0.5
Ethyl alcohol	cc	5
Distilled water	cc	45

The coal-tar dye was dissolved in the alcohol and added to the mixture of the other components while stirring the mixture.

Example 4

Disodium - 2,7-dibromo-4-hydroxymercuri-fluorescein	gram	.03
"Ponceau SX"	do	.06
Blossom scent	cc	2
Ethyl alcohol	cc	10
Distilled water	cc	188

Example 5

Disodium-2,7-dibromo - 4 - hydroxymercuri-fluorescein	gram	.03
Erythrosine	do	.05
Orange blossom scent	cc	1
Distilled water	cc	75

Compositions as above described have been tested in use over an extended period and found thoroughly satisfactory in respect to color and fastners. The coal-tar components are entirely innocuous and "Mercurochrome" at the low concentrations employed is likewise innocuous.

I claim:

1. liquid face rouge consisting essentially of a solvent selected from the group consisting of water and aqueous ethyl alcohol, and in solution in said solvent a first color component consisting of disodium-2,7-dibromo-4-hydroxymercuri-fluorescein and a second color component selected from the group consisting of 1-xylylazo-2-naphthol, the disodium salt of 9-o-carboxy-phenyl - 6 - hydroxy-2,4,5,7 tetraiodo-3-isoxanthone, the trisodium salt of 1-(4-sulfo-1-naphthyl azo) -2-naphthol-3, 6 disulfonic acid, the disodium salt of 2-(5-sulfo-2,4-xylylazo) -1-naphthol-4-sulfonic acid, and the disodium salt of 1-psuedocumylazo-2-naphthol-3, 6-disulfonic acid, the first color component being present at a concentration in the range 0.003 to 0.2 percent by weight and the second color component being present at a concentration ⅓ to 3 times that of the first component.

2. A liquid face rouge consisting essentially of an aqueous solution containing 0.003 to 0.2 percent by weight of disodium-2,7-dibromo-4-hydroxymercurifluorescein and one third to three times that amount of the disodium salt of 1-psuedocumylazo-2-naphthol-3,6-disulfonic acid.

3. A liquid face rouge consisting essentially of an aqueous solution containing 0.003 to 0.2 percent by weight of disodium-2,7-dibromo-4-hydroxymercurifluorescein and one third to three times that amount of the trisodium salt of 1-(4-sulfo - 1-naphthylazo) -2-naphthol-3,6-disulfonic acid.

4. A liquid face rouge consisting essentially of an aqueous solution containing 0.003 to 0.2 percent by weight of disodium-2,7-dibromo-4-hydroxymercurifluorescein and one third to three times that amount of the disodium salt of 2-(5-sulfo-2,4-xylylazo) -1-naphthol-4-sulfonic acid.

5. A liquid face rouge consisting essentially of an aqueous solution containing 0.003 to 0.2 percent by weight of disodium-2,7-dibromo-4-hydroxymercurifluorescein and one third to three times that amount of the disodium salt of 9-o-carboxyphenyl - 6 - hydroxy - 2,4,5,7 -tetraiodo-3-isoxanthone.

6. A liquid face rouge consisting essentially of a solvent consisting of a major proportion of water and a minor proportion of ethyl alcohol containing in solution 0.003 to 0.2 percent by weight of disodium-2,7-dibromo-4-hydroxymercurifluorescein and 1-xylylazo-2-naphthol at a concentration of ⅓ to 3 times the concentration of the disodium-2,7-dibromo-4-hydroxymercuri-fluorescein.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,535,003	White	Apr. 21, 1925
1,862,049	Chiles	June 7, 1932

FOREIGN PATENTS

Number	Country	Date
3.442	Great Britain	of 1881

OTHER REFERENCES

Goodman, Cosmetic Dermatology 1936, page 361.

Merck Index, 5th ed. 1940, p.593.

New & Nonofficial Remedies, 1946, pp. 142, 143, 144.

Chilson, Modern Cosmetics, 1938, p. 331.