13
Rouges, blushers and eye cosmetics

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13.1 INTRODUCTION

Rouges, blushers and highlighters are coloured preparations generally applied to the cheeks, and are either liquid, cream or powder mixtures. Eye make-up preparations cover similar basic formulations but with more intensive and different colour content.

The skin colour can be obtained either by water insoluble inorganic or organic pigments (usually lakes), or by water soluble organic colours in aqueous products. The latter actually stain the skin. The pigments used must be carefully chosen and checked for resistance to bleeding and smudging. Colour bleeding can occur as a result of moisture and sebum present on the skin surface or from the formula ingredients themselves. Each formulation should be challenge tested to establish its microbiological status, and if necessary suitable preservatives added. The product should be tested at the development stage and during manufacture and storage, and safety in normal consumer use guaranteed as far as possible. Permissible safe preservatives must be used, with particular care for the choice of those for eye products.

13.2 ROUGES, BLUSHERS AND HIGHLIGHTERS

Rouges and blushers produce bright colour on the skin, and highlighters contain lower levels of pigments. The first two terms depend on the dictates of fashion. Classification of a product as a rouge, blusher or highlighter depends on pigment concentration. In view of this, the term 'rouge' will be used to cover all three classes in this chapter, leaving the development chemist to add the amount of pigment necessary to obtain the colour required.
13.2.1 Liquid rouges

In recent years this consistency has been less favoured in comparison to cream or pressed powder. The essential requirement of liquid rouges is to get the right viscosity and reasonable drying time. This can be achieved by making an emulsion base (Formula I) or an aqueous mixture of water soluble dyes with gums or thickeners and a wetting agent. Other additives can be added e.g. glycerol as a humectant (Formula II), or 10–22% alcohol to aid drying (Formula III).

**Formula I  Liquid rouge, emulsion type with insoluble pigments**

<table>
<thead>
<tr>
<th></th>
<th>% w/w</th>
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<tbody>
<tr>
<td>A Ethoxylated cetyl alcohol</td>
<td>3.0</td>
</tr>
<tr>
<td>Isopropyl myristate</td>
<td>2.0</td>
</tr>
<tr>
<td>Cetyl alcohol</td>
<td>0.5</td>
</tr>
<tr>
<td>Diethylene glycol monostearate</td>
<td>4.5</td>
</tr>
<tr>
<td>B Glycerol</td>
<td>20.0</td>
</tr>
<tr>
<td>Preservatives</td>
<td>q.s.</td>
</tr>
<tr>
<td>Water</td>
<td>to 100.0</td>
</tr>
<tr>
<td>C Pigments</td>
<td>1.5–4.0</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>2.0–3.0</td>
</tr>
<tr>
<td>D Perfume</td>
<td>0.0–0.5</td>
</tr>
</tbody>
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**Procedure**

1. Heat the ingredients of (A) to 75°C in a jacketed vessel. Mix well and maintain temperature.
2. In a separate vessel mix the preservative in the glycerol, add the water and heat to 75°C.
3. Form an emulsion by adding (A) to (B) with vigorous stirring. Continue mixing for 5–10 min.
4. Mix pigments and titanium dioxide in a ball mill or suitable powder mill until the dispersion of colour is uniform.
5. Cool to 60°C and add (C) in controlled amounts stirring continuously allowing the air to escape and the powders to become wetted. Stir until the cream is homogeneous.
6. Cool to 40°C and add the perfume and mix in.

**Formula II  Liquid rouge, gel type**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Methyl cellulose</td>
<td>2.0</td>
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<tr>
<td>Wetting agent</td>
<td>0.1–0.2</td>
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<tr>
<td>Glycerol</td>
<td>10.0</td>
</tr>
<tr>
<td>Water soluble colours</td>
<td>q.s.</td>
</tr>
<tr>
<td>Preservatives</td>
<td>q.s.</td>
</tr>
<tr>
<td>Water</td>
<td>to 100.0</td>
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