

Noting the melting points of the ingredients:

Emulsifying Wax BP	52°C
White/Yellow Soft Paraffin BP	38–56°C

1. Weigh 1.8 g Zinc Oxide BP on a Class II or electronic balance.
2. Transfer to a porcelain mortar.
3. Weigh 11.4 g Starch BP on a Class II or electronic balance.
4. Add the Starch BP to the Zinc Oxide BP in the porcelain mortar and stir with the pestle.
5. Weigh 1.5 g Emulsifying Wax BP on a Class II or electronic balance.
6. Weigh 1.8 g Coal Tar BP on a Class II or electronic balance.
7. Weigh 13.5 g Yellow Soft Paraffin BP on a Class II or electronic balance.
8. Place the Emulsifying Wax BP into an evaporating dish and melt over a water bath at 70°C.
9. Add the Coal Tar BP and half of the Yellow Soft Paraffin BP to the evaporating basin.
10. Stir at 70°C until melted.
11. Add the remaining Yellow Soft Paraffin BP stir until melted.
12. Cool to approximately 30°C and add the powders and stir constantly until cold.
13. Weigh 20 g of the paste transfer to a collapsible tube or amber glass jar, dispense and label.

#### 5. Choice of container

A collapsible tube or plain amber jar would be most suitable.

#### 6. Labelling considerations

##### a. Title

The product is official, therefore the following title would be suitable: 'Zinc and Coal Tar Paste BP'.

##### b. Quantitative particulars

Quantitative particulars are not required as the product is official.

##### c. Product-specific cautions (or additional labelling requirements)

'For external use only' will need to be added to the label as the product is a paste for external use.

## Tips

The powders must be mixed, remembering the principle of 'doubling-up' in order to ensure even mixing of the powders.

## Tips

The above method is as recommended by the *British Pharmacopoeia*. An alternative method would be:

- Melt the Yellow Soft Paraffin BP and Emulsifying Wax BP together at the lowest possible temperature, stirring until cool, to make a homogeneous product.
- Mix the powders as before but transfer them to a glass tile and incorporate the powders into the base using a spatula.
- Finally, using a spatula (preferably ebonite), incorporate the Coal Tar BP.

This method may be preferred because of the possible problem of toxicity associated with Coal Tar BP. This method would avoid heating the Coal Tar BP and therefore reduce the volatilisation of some of the coal tar constituents and reduce the risk of sedimentation.