



Edition: BP 2025 (Ph. Eur. 11.6 update)

Zinc and Salicylic Acid Paste

[General Notices](#)

Lassar's Paste

DEFINITION

Zinc Oxide, finely sifted	240 g
Salicylic Acid, finely sifted	20 g
Starch, finely sifted	240 g
White Soft Paraffin	500 g

Extemporaneous preparation

The following directions apply.

Melt the White Soft Paraffin, incorporate the Zinc Oxide, the Salicylic Acid and the Starch and stir until cold.

The paste complies with the requirements stated under Topical Semi-solid Preparations and with the following requirements.

Content of zinc oxide, ZnO

22.5 to 25.5% w/w.

Content of salicylic acid, C₇H₆O₃

1.9 to 2.1% w/w.

IDENTIFICATION

A. Shake 1 g with 10 mL of [water](#), filter and add [iron\(III\) chloride solution R1](#) to the filtrate. An intense reddish violet colour is produced which remains on the addition of 5M [acetic acid](#) but disappears on the addition of [2M hydrochloric acid](#) with the separation of a white, crystalline precipitate.

B. Heat 0.5 g gently in a porcelain dish over a very small flame until the basis is completely volatilised or charred. Increase the heat until all the carbon is removed. The residue is yellow when hot and white when cool.

TESTS

ASSAY

For salicylic acid

Shake 0.5 g with 10 mL of 1M [hydrochloric acid](#) and 10 mL of [ether](#) until fully dispersed. Decant and reserve the aqueous layer. Extract the ether layer with two further 10 mL quantities of 1M [hydrochloric acid](#), combine the aqueous extracts with the reserved aqueous layer, wash with 10 mL of [ether](#) and reserve for the Assay for zinc oxide. Combine the ether extracts, add 15 mL of [petroleum spirit](#) (boiling range, 40° to 60°) and extract with successive quantities of 20 mL, 10 mL and 10 mL of a mixture of equal volumes of [ethanol](#) (90%) and 1M [sodium hydroxide](#). Dilute the combined extracts to 100 mL with [2M hydrochloric acid](#), further dilute 15 mL of the resulting solution to 50 mL with the same solvent and measure the [absorbance](#) of the final solution at the maximum at 302 nm, [Appendix II B](#). Calculate the content of $C_7H_6O_3$ taking 260 as the value of A(1%, 1 cm) at the maximum at 302 nm.

For zinc oxide

To the combined aqueous extracts obtained in the Assay for salicylic acid add 20 mL of 1M [sodium hydroxide](#) and 50 mg of [xylene orange triturate](#). To the resulting solution add sufficient [hexamine](#) to change the colour of the solution to red and then a further 3 g of [hexamine](#) and titrate with [0.1M disodium edetate VS](#). Each mL of [0.1M disodium edetate VS](#) is equivalent to 8.139 mg of ZnO.