Quality standards

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

Zinc Cream

General Notices

DEFINITION

Zinc Cream contains 32% w/w of Zinc Oxide in a suitable water-in-oil emulsified basis.

Extemporaneous preparation

The following formula and directions apply.

Zinc Oxide, finely sifted	320 g
Calcium Hydroxide	0.45 g
Oleic Acid	5 mL
Arachis Oil	320 mL
Wool Fat	80 g
Purified Water, freshly boiled and cooled	Sufficient to produce 1000 g

Mix the Zinc Oxide and the Calcium Hydroxide, triturate to a smooth paste with a mixture of the Oleic Acid and Arachis Oil, incorporate the Wool Fat and add gradually with continuous stirring sufficient Purified Water to produce 1000 g.

The suitability of the Cream for use as a diluent should be confirmed before use.

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

Content of zinc oxide, ZnO

30.0 to 34.0% w/w.

IDENTIFICATION

The residue obtained in the Assay is yellow when hot and white when cool.

ASSAY

Heat 0.5 g of the cream gently in a porcelain dish over a small flame until the basis is completely volatilised or charred. Increase the heat until all the carbon is removed. Dissolve the residue in 10 mL of 2M <u>acetic acid</u> and add sufficient <u>water</u> to produce 50 mL. To the resulting solution add 50 mg of <u>xylenol orange triturate</u> and sufficient <u>hexamine</u> to produce a violet-pink colour. Add a further 2 g of <u>hexamine</u> and titrate with <u>0.1M disodium edetate VS</u> until the solution becomes yellow. Each mL of <u>0.1M disodium edetate VS</u> is equivalent to 8.138 mg of ZnO.

