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Selenium Sulfide Scalp Application

General Notices

Selenium Sulphide Scalp Application
Selenium Sulfide Application
Selenium Sulfide Cutaneous Suspension

DEFINITION

Selenium Sulfide Scalp Application is a *cutaneous suspension* of Selenium Sulfide in a suitable liquid basis.

The scalp application complies with the requirements stated under Liquids for Cutaneous Application and with the following requirements.

Content of selenium sulfide, SeS_2

90.0 to 110.0% of the stated amount.

IDENTIFICATION

A. Gently boil a quantity containing 50 mg of Selenium Sulfide with 5 mL of *nitric acid* for 1 hour, dilute to 50 mL with *water* and filter. To 5 mL of the filtrate add 10 mL of *water* and 5 g of *urea*, boil, cool and add 2 mL of *dilute potassium iodide solution*. A yellow to orange colour is produced, which darkens rapidly on standing.
B. Allow the coloured solution obtained in test A to stand for 10 minutes and filter through *kieselguhr*. The filtrate yields the reactions characteristic of *sulfates*, Appendix VI.

TESTS

Acidity

pH, 4.0 to 5.5, Appendix V L.

ASSAY

To a quantity containing 0.15 g of Selenium Sulfide add 25 mL of *fuming nitric acid*, heat on a water bath for 2 hours, cool and dilute to 250 mL with *water*. To 25 mL of the solution add 10 g of *urea* and 25 mL of *water*, boil, cool, add 10 mL of *dilute potassium iodide solution* and 10 mL of *chloroform* and titrate immediately with 0.05M *sodium thiosulfate VS* using *starch mucilage*, added towards the end of the titration, as indicator. Shake vigorously as the end point is approached. Each mL of 0.05M *sodium thiosulfate VS* is equivalent to 1.789 mg of SeS_2.