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Sulfur Ointment

DEFINITION

Sulfur Ointment contains NLT 9.5% and NMT 10.5% of sulfur (S).

Precipitated Sulfur	100 g
Mineral Oil	100 g
White Ointment	800 g
To make	1000 g

Levigate the *Precipitated Sulfur* with the *Mineral Oil* to a smooth paste, and then incorporate with the *White Ointment*.

ASSAY

• **PROCEDURE**

Sample: 500 mg in a suitable conical flask

Analysis: Add 5 mL of nitric acid and 3 mL of bromine to the *Sample*, warm slightly, and allow to stand overnight. Heat gently on a steam bath until the excess bromine has been dissipated. Add 30 mL of water and then 30 mL of ether, and swirl to dissolve most of the ointment base. Transfer the mixture to a separator, with the aid of a 20-mL and a 10-mL portion of ether, followed by two 10-mL portions of water. Shake the mixture, and draw off the water layer into a suitable beaker or flask. Extract the ether layer with two 40-mL portions of water each containing 1 mL of hydrochloric acid. Heat the combined water extracts on a steam bath to remove all traces of ether. Dilute the solution with water to about 200 mL, heat to boiling, and add slowly, with constant stirring, about 20 mL of hot barium chloride TS. Heat on a steam bath for 1 h, then collect the precipitate on a filter, wash it well with hot water, dry, and ignite to constant weight. The weight of the barium sulfate so obtained, multiplied by 0.1374, represents the weight of sulfur (S).

Acceptance criteria: 9.5%–10.5%

ADDITIONAL REQUIREMENTS

• **PACKAGING AND STORAGE:** Package in well-closed containers, and avoid prolonged exposure to excessive heat.

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
SULFUR OINTMENT	Brian Serumaga Science Program Manager	CMP2020 Compounding 2020
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	CMP2020 Compounding 2020

Chromatographic Database Information: [Chromatographic Database](#)

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